VOLUME II

STUDIES IN SOVIET THOUGHT

A Quarterly of the Institute of East-European Studies

at the University of Fribourg, Switzerland

D. REIDEL PUBLISHING COMPANY

DORDRECHT / BOSTON / LANCASTER

STUDIES IN SOVIET THOUGHT

A QUARTERLY OF THE INSTITUTE OF EAST-EUROPEAN STUDIES

AT THE UNIVERSITY OF FRIBOURG / SWITZERLAND

VOLUME II No. 1 MARCH 1962

Abbreviations and Transliteration

Statement of Policy

J. M. Bocheński The three components of Communist ideology

H. Fleischer The materiality of matter

D. D. Comey Two recent Soviet conferences on logic

L. H. Hackstaff & J. M. Bocheński A study in many-valued logic

S. Müller-Markus Die Organisation der sowjetischen Philosophie der Physik seit Dezember 1960

Notes and Comments

Reviews

V. P. Tugarinov: O cennostjax žizni i kul'tury (H. Fleischer)

G. L. Kline: The withering away of the state: philosophy and practice (D. D. Comey)

Chronology

Retrospective (1947 to 1959 inclusive)

Current (1960)

Report from the Institute

A note to Western authors

This content downloaded from 139.184.14.159 on Fri, 08 Jul 2016 11:05:34 UTC
All use subject to http://about.jstor.org/terms

ABBREVIATIONS

AN	Akademija nauk (of SSSR unless otherwise specified)
AON	Akademija obščestvennyx nauk pri CK KPSS
CK KPSS	Central'nyj komitet kommunističeskoj partii sovetskogo sojuza
FN	Naučnye doklady vysšej školy. Filosofskie nauki
IF	Institut filosofii AN
LGU	Leningradskij gosudarstvennyj universitet
MGU	Moskovskij gosudarstvennyj universitet
SSSR	Sojuz sovetskix socialističeskix respublik
VF	Voprosy filosofii
VPŠ	Vyššaja partijnaja škola
VUZ	Vyššoe učebnoe zavedenie (and its plural)

TRANSLITERATION SYSTEM

Russian Letter *Cap. Ital.*	Studies in Soviet Thought	U.S. Library of Congress	Russian Letter *Cap. Ital.*	Studies in Soviet Thought	U.S. Library of Congress
А *а*	a	a	Р *р*	r	r
Б *б*	b	b	С *с*	s	s
В *в*	v	v	Т *т*	t	t
Г *г*	g	g	У *у*	u	u
Д *д*	d	d	Ф *ф*	f	f
Е *е*	e	e	Х *х*	x	x
Ё *ё*	ë	ë	Ц *ц*	c	t͡s
Ж *ж*	ž	ž	Ч *ч*	č	c͡h
З *з*	z	z	Ш *ш*	š	s͡h
И *и*	i	i	Щ *щ*	šč	s͡hch
Й *й*	j	ĭ	Ъ *ъ*	″	″
К *к*	k	k	Ы *ы*	y	y
Л *л*	l	l	Ь *ь*	′	′
М *м*	m	m	Э *э*	é	é
Н *н*	n	n	Ю *ю*	ju	i͡u
О *о*	o	o	Я *я*	ja	i͡a
П *п*	p	p			

Note: Articles in German will use 'ch' in place of 'x'. Commonly used proper names retain the form which is ordinary in English or German – e.g. Trotsky, Khrushchov, etc.

This content downloaded from 139.184.14.159 on Fri, 08 Jul 2016 11:05:34 UTC
All use subject to http://about.jstor.org/terms

STATEMENT OF POLICY

The 'Studies in Soviet Thought', which becomes with the present issue a quarterly journal, is the official organ of the Institute of East-European Studies at the University of Fribourg, Switzerland. It is intended to serve as an international medium for the publication – mostly in English but also in German and French – of research papers, short notes, critical reviews and other writings having to do with contemporary Soviet philosophy. While philosophy as developed in the Soviet Union will be the main object, it is also intended to cover, as the occasion arises, the philosophical production of other Communist countries.

The rapid development of Soviet philosophy makes its study ever more important. Part of the aim of the 'Studies' is to bring together more closely philosophers working in the field. In addition, it is hoped that this journal will be useful to philosophers who are not specialists in Soviet studies and who wish to be informed on philosophical developments inside the Soviet Union.

A volume under the same title was published in 1961. It will be considered as the first volume of the series. However, some changes will be operated in the structure of the text especially in as far as more space will be dedicated to reviews and chronicles.

The views and opinions expressed are those of the authors and are not necessarily shared by the editors or members of the Institute.

This content downloaded from 139.184.14.159 on Fri, 08 Jul 2016 11:05:34 UTC
All use subject to http://about.jstor.org/terms

JOSEPH M. BOCHEŃSKI

THE THREE COMPONENTS OF COMMUNIST IDEOLOGY

In this paper, it is intended to propose a working hypothesis concerning the development of Communist ideology, especially with regard to its philosophical aspects. This hypothesis was formed in the course of an effort to understand what is changing and what does not change in Communist, and more especially, in Soviet doctrine.[1] It has proved to be fruitful in its application.[2]

The hypothesis is briefly this: *there are at least three different components in Communist ideology, and above all in Communist philosophy – the basic dogma, the systematic superstructure, and the declassified doctrines.*

The boundaries between these three components are not always clearly drawn, and there can be some difficulty in determining whether a particular doctrine belongs to the first or to the second, to the second or to the third group. Where it does belong, only the behavior of Soviet authorities and of Communist writers can indicate. But the hypothesis itself – namely the assumption that there are such classes of statements – helps considerably in research, because it precisely focuses the attention upon the differences in the said behavior.

Until recently (since 1947 and especially since 1950), the process of evolution in Soviet thought has consisted primarily in the fact that our three components have become apparent, while hitherto, everything – from the dogma of the future victory of Communism down to the illegitimacy of cybernetics – was thought to have the status of parts of equal significance in Soviet ideology.

There is little in Soviet philosophical literature which would resemble our hypothesis as far as explicit divisions of ideology are concerned. But the practice seems to point very strongly towards the *de facto* recognition of such an articulation.

BASIC DOGMA. By this we mean a class of statements which are considered by all orthodox Communists to be axiomatic and basic in the structure

Studies in Soviet Thought II, 1 (March 1962)

of Communist ideology. Most of these statements are simple enough to be understood even by men without any philosophical training. One example is, according to Mr. Khruschchov, the sentence 'There is no God'; even a peasant in a kolhoz, said he, knows that this is so.

We do not intend to offer here a complete list of such sentences, but a few instances may be quoted as examples: that mankind evolves toward better states; that this development is necessary; atheism; the doctrine of the evilness of private ownership of the means of production; the theory of classes and of class-struggle; the historical mission of the proletariat; that the Party always knows best and possesses all rights; that it is an absolute duty of every individual to contribute toward the victory of Communism; and that such a victory is of historical necessity – these are certainly constituent parts of this 'basic faith'.

The property by which a statement is known to belong to this class of doctrine is that it is: *first*, not subject to *any* change and, *second*, that there is no freedom among Communists to interpret it in different manners. As far as the above enumerated doctrines are concerned, we do not know of a single case in the Soviet Union where anyone has been allowed to express doubts concerning them, or to freely interpret them.

SYSTEMATIC SUPERSTRUCTURE. The second class is composed of those doctrines which are thought to be strictly connected, but not identical, with the basic dogma. Most of what did and still does constitute the content of the so-called Dialectical and Historical Materialism belongs here. The doctrines in question are, contrary to those belonging to the basic faith, rather abstruse and difficult to comprehend. They are clearly products of the thinking of intellectuals with some philosophical training, and the influence of Hegel is obvious in most of them.

By way of example we may cite: that there are contradictions in the essence of every being; that new qualities are being produced by 'dialectical leaps'; that there exists a peculiar 'dialectical' logic; that mental processes are all 'reflections' of reality; that there were exactly five major periods in the history of humanity.

We recognize that a statement belongs, at a given period, to this second class by observing *first*, that it must be verbally admitted by every Communist, and *second*, that there is a certain freedom of interpretation of such sentences. The difference between basic dogma and systematic

superstructure consists precisely in this second point. While the elements of the former cannot be freely interpreted at all, there is a certain freedom in the interpretation of the latter.

Two examples may clarify what is meant by this freedom:

1. Every Communist will verbally admit that there is a sort of logic which is peculiar to Communism called 'dialectical logic'; that this logic is different from formal logic, and more profound and important. But when K. S. Bakradze and N. I. Kondakov were accused in 1955 of denying the existence of dialectical logic, they were allowed to respond. In the *Voprosy Filosofii* [3], they stated that they had never dreamed of anything of the sort. However – and this is the important point – they added that dialectical logic has nothing to do with any sort of syllogism, reasoning, deduction and so on. It is simply a theory of the development of the human mind and its relation to reality. By this, the word being duly preserved, dialectical logic has been explained away.

2. Every Communist must also admit that there are contradictions in every being. This is also what A. Kol'man and A. A. Zinov'ev stated forcibly in the discussion on contradiction in 1958.[4] But once again, they proceeded to explain their meaning: they asserted that these contradictions are not contradictions in the Aristotelian sense; they are simply polar oppositions of various sides of the same object. Here again, while the words were retained, the original doctrine was explained away.

DECLASSIFIED DOCTRINES. A third class is formed by statements which, although they were sometimes (before 1947 or 1950) considered as belonging to ideology, are now said to stand outside its proper scope. Technically speaking, they are not considered as parts of ideology in the Marxian meaning of the word, and consequently they are not class or party-bound. The decisive step towards the recognition that such doctrines may even exist was taken on June 20, 1950 by Stalin when he stated that language is not a superstructure, because it is directly linked with production (i.e., with productive forces) and not with the relations of production (i.e., with the 'base'). Since then, many domains have been declared to be of the same nature. The most important here is the distinction of two elements in the structure of the natural sciences: one of them, namely statements of facts, laws and rules of procedure, is not class-bound, while the other element, containing the most general theories, is a part of the

class-superstructure. We find this distinction for the first time in a work by G. E. Glezerman published in 1954.[5]

The most striking instances of such marginal doctrines are: cybernetics [6], mathematical logic as part of philosophy [7], Einstein's theory of relativity,[8] and of course, since 1951, formal logic itself.[9]

Contrary to the systematic superstructure, the declassified doctrines enjoy a high degree of freedom in the Soviet Union. Individual thinkers are allowed to criticize or defend them, and there were in the Soviet Union a number of interesting discussions in this field, concerning not only the interpretation, but even the verbal formulation of the doctrines concerned. The most important was probably the discussion about Einstein in 1950–1955, which ended in a victory for the proponents of Einstein.

The hypothesis is, then, that while the basic dogma is rigidly upheld, systematic superstructure must be verbally supported but may be modified by re-interpretation, and the declassified doctrines enjoy a rather complete freedom.

THE RELATIVE INTEREST OF THE THREE CLASSES. Of the three, the systematic superstructure and its developments are, of course, of paramount importance in every study of Communist philosophy. Declassified doctrines are, in fact, para-philosophical, while basic dogma belongs rather to *Weltanschauung* than to scientific philosophy. But the topics discussed in the field of the systematic superstructure are mostly philosophical topics of high interest to everybody interested in speculation.

Moreover, if anything of real importance for the development of Communism as a whole is to happen on the level of thought, it will certainly happen inside the systematic superstructure. It would seem, then, that the Communists are right from their point of view when they do not fear any danger to their basic dogma from a relative freedom granted to declassified doctrines. On the other hand, there are no signs in Soviet theoretical thought (as opposed to classical Soviet literature and to the so-called 'revisionism' of Kolakowski, for example, which is often a simple denial of Communism), that any element of the basic dogma is directly subject to any kind of change. But the systematic superstructure is, on one hand, directly connected with the basic dogma, and on the other hand, subject to re-interpretation by individual thinkers. It might

consequently happen that a re-interpretation of parts of that superstructure will influence the basic dogma itself. There is, from this point of view, a possibility of substantial development in Communism.

REFERENCES

1. This hypothesis arose out of discussions in the Fribourg group of researchers.
2. The author is grateful for an oral confirmation of this hypothesis from a quite different field, namely that of political economy, voiced by Professor K. C. Thalheim.
3. VF 1956, 2, 218–224 and 224–228. There is an able presentation of Bakradze's position in M. N. Alekseev: *Dialektičeskaja logika.* M. 1960. p. 8ff.
4. Texts in N. Lobkowicz: *Das Widerspruchsprinzip in der neueren sowjetischen Philosophie.* (Sovietica). Dordrecht. 1959.
5. *Bazis i nadstrojka v sovetskom obščestve.* Izd. AN SSSR, 1954.
6. Compare the earlier situation as described by A. v. Weiss: "Logischer Positivismus und Kybernetik im Blickfeld bolschewistischer Kritik", *Freiburger Zeitschr. f. Philosophie und Theologie* 2, 1955, 273–295 (also: *Ost-Probleme* 8, 1956 (43), 1478–1485) with the content of *Primenenie logiki v nauke i texnike.* Izd. AN SSSR.1960.
7. The earlier attitude is represented by V. P. Tugarinov – L. J. Majstrov: "Protiv idealizma v matematičeskoj logike", *VF* 1950, 3, 331–338 and by the self-criticism of S. A. Janovskaja: "Pismo v redakciju", *VF* 1950, 3, 339–342. This is to be compared e.g. with A. Kol'man: "Značenie simboličeskoj logiki", in: *Logičeskie issledovanija.* Izd. AN SSSR. 1959. 2–19 and A. A. Zinov'ev: *Filosofskie problemy mnogoznačnoj logiki.* Izd. AN SSSR. 1960.
8. S. Müller-Markus: *Einstein und die Sowjetphilosophie. I* (Sovietica). Dordrecht. 1960.
9. J. M. Bocheński: "Soviet Logic", in: Studies in Soviet Thought I. 1960. 29–38.

HELMUT FLEISCHER

THE MATERIALITY OF MATTER

The central category of Dialectical Materialism, the philosophical concept of matter, is not only the subject of a discussion between the Dialectical Materialists and their critics, but also the subject of an internal discussion within their own ranks. The framework of this discussion is the search for a proper understanding of Lenin's contribution to the theory of matter. One cannot say that the discussion is being waged very intensively and systematically; there seems to be a certain inclination to avoid some of the most crucial problems. But, as a consequence of the progressing individualization of philosophical life in the Marxist-Leninist camp, we may observe remarkable manifestations of a thought which does not let itself be bound by traditional habits but simply follows the logic of the problems.

POINT OF DEPARTURE: LENIN'S DEFINITION

In the West it is often said that Lenin proposed only an 'epistemological' (gnoseological) definition of matter, which strictly speaking does not characterize matter as such but rather the general essence of reality as an 'esse' which is not 'percipi' but exists independently of the human subject and its thinking activity. In other words, Lenin defined only the general thesis of realist epistemology but not the position of materialism; this latter would require an ontological definition of matter 'in itself', outside of its correlation with consciousness as cognizing subject. Those who argue in this way usually base themselves on several striking passages in Lenin's *Materialism and Empiriocriticism:* "Matter is a philosophical category denoting objective reality which is given to man in his sensations, and which is copied, photographed and reflected by our sensations, while existing independently of them."[1] and: "... the *sole* 'property' of matter with whose recognition philosophic materialism is bound up is the property of *being an objective reality*, of existing outside our mind."[2] This point of view, it is said, may also be shared by decidedly non-materialist philosophers, e.g. Thomists.

Studies in Soviet Thought II, 1 (March 1962)

Even among the Marxist-Leninist philosophers there arose doubts as to whether Lenin really had fixed the 'only' philosophically relevant characteristic of matter by his definitions. Some denied this and demanded an ontological reformulation of the concept of matter; they stated that Lenin's formulae delimit materialism only from 'subjective' idealism but not from the 'objective' idealism of the Platonic, Hegelian or Thomist types. But it seems to us that the situation is not so simple; one may contest that the above mentioned propositions in *Materialism and Empirio-criticism* actually contain the whole of 'Lenin's concept of matter'. The irritating term, the 'only property', does indeed suggest that this is meant to be a complete definition; but in the same book are to be found not a few places where the author presents further – and, moreover, clearly ontological – elements of such a definition. Thus Lenin said: "There is nothing in the world but matter in motion, and matter in motion cannot move otherwise than in space and time."[3] Elsewhere it becomes apparent that, according to Lenin, matter does not only (as the object of cognition) *provoke* the ideas of the subject, but also that it *produced* man and his consciousness in the course of its natural-historical evolution.[4] Finally, Lenin establishes a further universal attribute of matter, namely the ability of 'reflection' *(otraženie)*, some kind of susceptibility which is analogous to sensation but which exists already in the inorganic *fundamentum* of matter.[5] In the later *Philosophical Notebooks* Lenin is even ready to accept and to connect with his materialistic conception the traditional category of 'substance' and to regard matter-substance as the active *ἀρχή* of the universe.[6] All of these are constituent elements of Lenin's concept of matter which thereby assumes an ontological character. Consequently, the epistemological characterization of matter as 'objective reality' is certainly a fundamental and primary point of the theory, but it does not constitute the entirety of Lenin's concept of matter. Lenin's famous words in which he declared 'objective reality', i.e. independence of 'our consciousness', to be the only fundamental philosophical predicate of matter, may be regarded as an overstatement made in the heat of discussion. (The same holds true for another statement of Lenin: that it is impossible to 'define' matter and consciousness other than by indicating which of them is 'primary' and 'secondary' in relation to the other.) That this – as it seems to us – evident circumstance was not the occasion for a brief clarification but the starting-point of a lengthy and sometimes

confused discussion (which has not come to an end up to now) is due to the notorious traditionalism of Marxist-Leninist philosophers.

THREE LINES OF INTERPRETING LENIN

In the Soviet and international literature of Diamat (as far as we have been able to determine) there exist three points of view on the theory of matter.
1. Stubborn attachment to the narrow epistemological version in which Lenin presented the concept of matter in a few places of his *Materialism and Empiriocriticism*. Such a procedure is usual in textbooks and popular writings which simply refrain from penetrating the problematic. But there are also examples of an explicit, even aggressive, contestation of any ontological meaning which the category of matter could have. One German representative of Diamat, G. Redlow, vehemently fought against the opinion that Dialectical Materialism might be compatible with an ontological concept of matter; the category of 'substance' which had been proposed as the ontological concept of matter must be, according to Redlow, strictly dismissed.[7]
2. The 'innovators' against whom Redlow's philippic is directed consciously transgress the borderline of the purely gnoseological discussion (and terminology) and understand Diamat as a primarily – though not 'purely' – ontological doctrine. S. L. Rubinštejn, V. P. Rožin, M. N. Rutkevič, V. P. Tugarinov and other leading Marxist-Leninist philosophers frankly proclaim the existence of an ontology or at least an ontological aspect of Diamat. Among these especially Tugarinov developed the ontological problematic of matter.[8] Before matter becomes the object of human knowledge, it exists as the substance of the world, the foundation *(osnova)* of all Being (consciousness included), the substratum or the 'bearer' *(nositel')* of all properties, relations, forms, structures and other manifestations.
3. Between the two tendencies there is a group – probably rather numerous – which deems it possible to develop a complete systematic of the doctrine on matter along the traditional ways of thought elaborated by the classics, without any major reconstruction like the establishment of a special ontological doctrine. The most productive spokesman of this group, F. T. Arxipcev, recently presented this point of view – after some preparatory writings – in a book.[9] He is aware that Lenin, faced with his

epistemologically-oriented opponents, had predominantly stressed the gnoseological implications of the materialist theory [10]; that he, however, was far from understanding the primacy *(pervičnost')* of matter over consciousness only in a gnoseological sense, but rather in all of its aspects, as Engels had exposed it in his 'fundamental question of philosophy'. This question – what is the interrelation between Being and consciousness? – has 'two sides'; the 'first' side of the question (some Soviet authors used to simply mark it with its number to avoid the name 'ontological') refers to the *origin* of consciousness or matter, the 'second' (gnoseological) to the nature, validity and limits of human *knowledge.* Lenin's doctrine has to be seen in the light of this double question: the independence of objective reality (= matter) from consciousness proves to be not only independence of 'our' human, cognizing consciousness, but also independence from every sort of consciousness, be it conceived even as a superhuman or divine consciousness (spirit). Arxipcev and others, furthermore, try to deduce the ontological thesis on the material nature of objective reality from the proposition that our knowledge is sensual; sensual cognition is *eo ipso* cognition of 'sensual things', of a natural, not supranatural reality.[11] The further attributes of matter – e.g. motion, space, time, substantiality and reflection – appear merely as explicitations and concretizations of the fundamental thesis on the priority of matter over consciousness.[12]

THE ONTOLOGICAL CONCEPT OF MATTER

The advantage of the explicitly ontological reflection on matter is that it makes visible the decisive philosophical problem: *what does the 'materiality' of matter mean?* Ontology has a legitimate right to ask what matter is like 'without' consciousness, 'before' it has produced the latter, and 'why' matter produces consciousness. These are questions which the ordinary textbooks of Diamat at best touch very briefly, though the problem had been clearly posed by Engels.

In his books on the categories of Dialectical and Historical Materialism, V. P. Tugarinov pointed out three main features of matter: 1. in its most simple and immediate meaning the material is the 'corporeal' *(telesnyj, veščestvennyj)*, the physical. "Marxism by no means rejects such an understanding of the material, as some Soviet philosophers believe."

2. matter is substance, "i.e. the general basis *(osnova)* of all Being and thereby the bearer of all natural and social phenomena. The substantial character of matter conditions the unity of the world." 3. matter is the objective reality which exists independently of our will and consciousness. "If we may call the first two sides of the concept of matter the ontological, this third side should be regarded as the mainly gnoseological, and is bound up with the interrelation between the objective and the subjective, i.e. with consciousness." [13]

Instead of being the 'only' property of matter which is fundamental for the philosopher, 'objective reality' here has become the secondary aspect of the ontological characterization of matter. In a similiar way the German Diamat philosopher G. Klaus pointed out: "The essence of materialism consists not only in this, that it recognizes the existence of an objectively real, external world, but it demands above all an explanation of consciousness through matter." To demonstrate how matter produces consciousness is the task of a 'Marxist ontology' which has not yet been elaborated.[14]

The ontological considerations on matter are significant, firstly, because they make it clear that 'matter' and 'material' cannot serve as terms by which everything in the world could be designated (as it could appear from such summary statements as 'the world is matter') but rather have a more specific function in the 'categorial syntax'; they are 'substantial' categories which cannot be applied to properties and relations, at least not in every case;[15] secondly, because they direct the philosophical interest towards an investigation of the 'inner quality' of that substance which produces the immense multitude of forms in this world. Moreover, in question here is not only the ontological concept of matter, but also the ontological concept of consciousness, the conceptual fixation of the peculiar 'mode of being' which is characteristic of the spiritual sphere of man.

MATTER AND CONSCIOUSNESS

The materialist doctrine on substance is monistic, i.e. recognizes only one substance – the '*res extensa*' – as something independently existing, uncreatable and indestructible. The spiritual *(duxovnyj)* sphere or consciousness – by which Diamat philosophers understand both the conscious *processes* (activities) and the *contents* of consciousness (thoughts,

ideas, etc.) – appears to Diamat philosophy as being incorporated into the context of the material world in a highly complex way. According to Lenin, an 'absolute counterposition' of matter and consciousness is legitimate only within the limits of epistemological consideration; beyond these limits it becomes 'relative' – a proposition which also provoked disputes among Soviet philosophers.

Consciousness is a phenomenon of the one material world, but this does not mean that it might be directly titled 'material'. "Only substance as the whole (nature)", Tugarinov says, "or its parts – bodies, objects, things – can be unreservedly called material."[16] There has been a rather lively dispute among Marxist-Leninist philosophers as to whether or not consciousness is something 'material', and the answer is univocally 'no', after several manifestations of 'vulgar materialism' connected with the Pavlovian *'perestrojka'* (reconstruction) of Soviet psychology had been rejected.[17]

But the discussion is still going on and the question as to how to positively define the nature of consciousness or the 'psychic' is still open. It is normal to designate consciousness as something 'ideal' *(ideal'noe)* which possesses the character of the real, but not material existence or physical qualities like extension and ponderability. It is also not identical with 'higher nervous activity' but is only an 'inner state' (*vnutrennee sostojanie)* or the 'resultative expression' of the latter; the textbooks rather vaguely call it a 'product' of matter in general or of the human brain in particular, a 'property' or 'function' of the most highly organized matter. Only one thing is completely clear – that consciousness does not represent, and is not bound up with any special 'spiritual substance'.

These ideas – which found a more or less detailed elaboration in the writings of S. L. Rubinštejn, V. V. Orlov, A. G. Spirkin, V. P. Tugarinov and others – deserve special consideration. Here we wish to touch only one of the questions involved: how the Dialectico-Materialistic ontology conceives the emergence of consciousness from matter. The problem has not been solved by the descriptive scheme of genealogical stages offered in the textbooks (reflection, irritability, sensibility, perception, presentation, thinking...), nor does it find its solution in the field of psycho-physiological study. What we have in mind here is the ontological question about the hypothetical disposition of matter which leads to the manifestation of consciousness in the material world.

In the introduction to his *Dialectic of Nature* Engels said something about the 'necessity' by which matter again and again 'must produce' its 'highest blossom', thinking spirit.[18] From that Tugarinov draws the inference that consciousness and thinking belong to the 'attributes', i.e. inseparable, universal properties, of the matter-nature; it is true, not in the sense of hylozoism and panpsychism, but 'in the sense that the whole of nature possesses a capability which produces consciousness under certain conditions'. He also recalls that Marx had some preference for Leibniz – not because of his idealism, of course, but because he had based his philosophy on the principle of the 'activity of nature'.[19]

In a similar way other Soviet philosophers – e.g. M. N. Rutkevič and S. T. Meljuxin – speak about the 'tendency towards evolution' or 'self-evolution' *(samorazvitie)* which is inherent to matter.[20] This hypothesis is being linked with the remarkable idea of Lenin concerning the structural and qualitative 'inexhaustibility' *(neisčerpaemost')* of matter; matter appears as some infinite potential from which emerges an equally infinite manifoldness of forms. "Apparently", V. V. Orlov writes, "the lower form of matter contains in itself tremendous *(ogromnye)* possibilities of development, which actualize themselves only under new conditions which are generated by the coming to be of a new, more perfect form of matter."[21] The Estonian astronomer, G. I. Naan, is continuing an old tradition when he exclaims: "Give me a sufficient mass of neutrons and I shall build the universe with the full variety of its properties."[22] Many similiar declarations might be adduced.

TOWARDS A 'COSMOLOGIA RATIONALIS'

We have to do here with a 'materialistic' doctrine of 'creative evolution' which makes the diversity of 'matter' and 'spirit' rather relative since it presupposes within matter some tendency to become conscious matter or – as Engels put it – to reach the point where nature acquires the consciousness of itself. We are told that it is the 'material substance' which produces living and conscious, thinking beings; but the producing, generating instance is not properly the *inorganic* basis on which the entire structure of the world is erected – and still less is it completely characterized by what we know about 'inorganic matter' in the terms of physics and chemistry. The 'formula' of the world may be regarded as an equation

on one side of which there is an infinite unknown quantity; it always contains some 'surplus' which exceeds every given actualization. The quarrel about what matter 'can' and what it 'cannot' afford then becomes futile.

The conceptual elaboration of this theory has not yet advanced very far; the critical examination of the categorial instruments is still to come. Such concepts as 'tendency towards self-evolution', 'possibility' and even 'potency' are used by Diamat philosophers with the utmost ease, without much consideration of their weighty problematic and tradition. By the way, it should be noticed that the well-known categories of the materialistic dialectic – 'contradiction', 'struggle of the opposites', 'transition from quantitative to qualitative change', 'form and content', 'negation' etc. – will not help essentially, because of their purely descriptive nature, towards a rational understanding of the 'productive activities' of matter. From the writings of Diamat philosophers one may get the impression that by the 'explanation' of all the manifold phenomena of our world as manifestations of matter something like a reduction of the unknown and puzzling to the well-known could be effected. But, in reality, the ontological – as well as the micro-physical – analysis of matter demonstrates that this matter is itself something profoundly mysterious.

These remarks are not so much meant as a criticism but rather as a call for further elaboration on the part of Diamat philosophers. Of course, the ontological theory of matter will contain many hypothetical and speculative elements, and it is quite important to be conscious of this state of affairs. The old Engels was perfectly right: at all times the consequence of thought had to make good for the lack of knowledge[23], and it would be fallacious to forget that, to meet one's contemporaries with an allegedly 'totally proven' doctrine in which all the enigmatic problems of human mind have been definitively solved.

REFERENCES

1. *Materialism and Empiriocriticism.* Moscow. 1952. p. 127
2. *Ibid.* p. 269.
3. *Ibid.* p. 177.
4. *Ibid.* pp. 69–81 (section "Did Nature Exist Prior to Man?")
5. *Ibid.* p. 88.
6. *Aus dem philosophischen Nachlaß.* Berlin. 1954. pp. 78, 330.
7. G. Redlow: "Lenin über den philosophischen Begriff der Materie" in *Deutsche Zeitschrift für Philosophie* 1959, 2, 199–217. This article was also reprinted in the book *Philosophie im Klassenkampf.* Berlin 1959, under the title "Materie oder Substanz?", 24–44.
8. V. P. Tugarinov: *Sootnošenie kategorij dialektičeskogo materializma.* Leningrad. 1956, and *Sootnošenie kategorij istoričeskogo materializma.* Leningrad. 1958.
9. F. T. Arxipcev: *V. I. Lenin o naučnom ponjatii materii.* Moscow. 1957; "Ponjatie materii i osnovnoj vopros filosofii", in *VF* 1959, 12, 143–152; *Materija kak filosofskaja kategorija.* Moscow. 1961.
10. *Materija kak filosofskaja kategorija.* p. 129.
11. *Ibid.* p. 171
12. *Ibid.* p. 170.
13. V. P. Tugarinov: *Sootnošenie kategorij istoričeskogo materializma.* pp. 75–77.
14. G. Klaus: *Jesuiten. Gott. Materie.* Berlin. 1959. pp. 158–159; 153.
15. *Ibid.* p. 61.
16. *Ibid.*
17. A bibliography of the writings on the nature of the psychic was published in VF 1960, 11, 180–181.
18. F. Engels: *Dialektik der Natur.* Berlin. 1952. p. 28.
19. V. P. Tugarinov: *Sootnošenie kategorij dialektičeskogo materializma.* pp. 72–73.
20. M. N. Rutkevič: *Dialektičeskij materializm.* Moscow. 1959. p. 148.
    S. T. Meljuxin: *O dialektike razvitija neorganičeskoj prirody.* Moscow. 1960. pp. 49, 121, 225.
21. V. V. Orlov: *Dialektičeskij materializm i psixofiziologičeskaja problema.* Perm'. 1960. p. 170.
22. G. I. Naan: "O beskonečnosti Vselennoj", in *VF* 1961, 6, 104.
23. *Ibid.* p. 25.

DAVID DINSMORE COMEY

TWO RECENT SOVIET CONFERENCES ON LOGIC[1]

Two conferences have recently taken place in the Soviet Union, the reports of which give an indication of what developments have been made lately in the field of logic. In the following article, each conference will be treated in a separate part, and a concluding part will offer an assessment of the conferences in the light of what is presently known about Soviet logic from other sources.[2]

I

The first conference was held at Moscow State University on October 27 and November 3, 1958, under the auspices of the philosophical section of the Scientific-Technical Council for the Ministry of Higher Education, and the topic concerned the problems of scientific research which had arisen in the field of formal logic.[3] Besides the representatives from the Ministry of Higher Education, there were a number of very competent logicians from the university faculties and various institutes. For instance, Professor S. A. Janovskaja attended from the mathematical faculty of Moscow State University, A. L. Subbotin from the Institute of Philosophy, A. V. Kuznecov, V. K. Finn, D. G. Laxuti and N. I. Stjažkin from the Laboratory of Electromodelling *(Elektromodelirovanija)* of VINITI, and B. V. Birjukov from the Physics & Mathematics Publishing House. Numerous lesser logicians attending included E. K. Vojšvillo, P. S. Popov, D. P. Gorskij, A. I. Uëmov and others, as well as representatives from such cities as Tbilisi, Erevan and even Murmansk.

The purpose of the conference was to make an evaluation of contemporary Soviet achievements in logic, and to make recommendations for future improvements. All of the participants were in agreement on the fundamental importance of formal logic, and emphasized the increasing role of logic, especially mathematical logic, in different fields of contemporary science and technology, especially with regard to information machines, computers, machine translation, automation and remote

Studies in Soviet Thought II, 1 (March 1962)

control. Note was taken of the substantial achievements of Soviet mathematical logicians in such fields as the theory of algorithms, recursive functions, problems of decidability and enumerability, but the comment was made that the field of interest of the mathematical logicians was quite narrow and reflected a tendency to regard mathematical logic as simply another branch of mathematics. And at this point in the proceedings, a long string of criticisms arose about inadequate work in logic outside mathematics.

It was pointed out that 'literally a handful of scientific workers' were doing 'serious work' on such important topics as probability logic, modal logic and logical semantics. The conference stressed a severe lack of adequate 'specialists of a broad profile' to work in these and other fields. The blame for the shortage was generally laid on inadequate teaching of logic, and specifically pinned on the philosophy faculty at Moscow State University, which was described as the only institution where any logicians are presently being trained. These students at M. S. U. receive no serious training in mathematical logic, and as the report of the conference states:

"To engage in scientific research in logic, including its philosophical problems, without knowing basic mathematical logic or even being familiar with its results is, in the present era, absolutely senseless."[4]

This is quite a remarkable statement to find in *Voprosy Filosofii* when one remembers the criticisms which this journal printed about mathematical logic in the early 1950's. At that time Lenin's strictures against 'idealism' and 'formalism' were used by the opponents of mathematical logic in such a way that mathematical logic was often accused (wrongly) of being 'idealistic' and hence incompatible with the principles of Marxism-Leninism.[5]

It is significant that the acceptance of mathematical logic in the Soviet Union has progressed to the point that its exponents not only are no longer on the defensive about their field, but have taken the offensive by making accusations of ignorance against those philosophers of logic who have neglected to learn any mathematical logic. Moreover, the mathematical logicians are able to resort to a little bit of 'quotation' from the 'classics' themselves. For instance, the conference report pointed out that:

"V. I. Lenin, in his book *Materialism and Empirio-Criticism,* mentions as

an important success of natural science the approximation to those uniform and simple elements of matter whose laws of motion permit a mathematical treatment. This is the real meaning of the possibility of fruitfully applying mathematics in physics.

"A further advance along the exact same lines has taken place in mathematical logic: it has revealed elementary objective logical connections which lie at the basis of various complex logical operations, which form the basis of numerous linguistic relations and relations in relay-contact and electronic systems, as well as in many other areas."[6]

Thus on the grounds that application of mathematical logical techniques to science is merely a further extension of the mathematical method in natural science which Lenin approved, it becomes possible for logicians to now engage in research which ten years ago would have been criticized by the philosophers. The conference report even admits that:

"the mathematicization of logical relations and operations, and the rise of logical calculi, is one of the sources of idealistic delusion and speculation on the interpretation of thought and the process of cognition, just as the mathematicization of physical relations was one of the reasons for the appearance of 'physical idealism'."[7]

Since nothing more than this is said concerning logic and 'idealism' in the report, one assumes that the conference regarded 'idealism' as one of the less immediate problems confronting logic.

The traditional split between dialectical and formal logic evidently did not seem problematic either, for the following statements seemed to suggest that mathematical logic would eventually have a sanguine effect on the form of dialectical logic:

"Considerable practical and theoretical significance is attached to those questions of logic which are connected with the interpretation of formal systems. The relations between formal systems and the interpretations of their contents include the general dialectical laws correlating form and content, abstract and concrete, universal and particular. From this follows both the necessity of considering these questions in the light of dialectical logic and also *the possibility of enriching the condition of dialectical logic itself by means of generalizing concrete results obtained in this part of mathematical logic.*

"In general, research in the area of dialectical logic remains among the important problems of scientific research work. The *important* part of

this work is the attempt to understand philosophically the results obtained by the mathematical, natural and social sciences and also the extensive knowledge about structure and the elements of logical thought which are contributed by contemporary formal and mathematical logic."[8]
Thus the relationship of dialectics to formal logic seems to have shifted from a Procrustean bed into which all logical results had to be forced to a part of the larger and more important problem of the philosophical interpretation of formal systems.
One of the chief complaints of the conference was the lack of a logic journal:
"The progress of scientific work in the field of logic is impeded by a lack of sufficient opportunities for publishing monographs and articles on logic. Even the publication of special collections *(sborniki)* is made difficult. Specialists in logic have many times, but unsuccessfully, raised the question of organizing either a special journal or periodically appearing collections *(sborniki)* on logical problems. Such journals exist in East Germany, Rumania, Poland, England, the United States, France, Italy, West Germany, Japan, Holland, Belgium, Sweden and other lands. The Rumanian logical journal was founded just recently."[9]
Although it does seem ludicrous that other Communist countries such as Poland and even East Germany and Rumania should have logic journals and the Soviet Union should not, the criticism raised by the conference has not borne fruit, since no logic journal has yet appeared. Moreover, there is only moderately more official support for theoretical logical research now than there was at the time of the conference, despite the strong warnings voiced by the participants:
"Organizational questions of improvement of logical research have already appeared in our press. However, these articles have not produced any kind of practical result whatsoever. Obviously, this testifies to the underestimation, by some persons and institutions on whom depend such organizational matters, of the significance of this branch of science, any lag in which will make itself greatly felt in a negative manner in the near future in many areas of scientific and pedagogical activities."[10]
The conference even tried to persuade those Soviet philosophers who wished to criticize Western philosophy that they should have an interest in modern logic: it was pointed out that since contemporary 'idealistic' movements in Western 'bourgeois' countries all use contemporary logic,

only by being familiar with such logic themselves can Soviet philosophers hope to effectively criticize such 'idealism'.

Among the other complaints registered in the final report was an indictment of administrators of pedagogical institutes responsible for broadening the teaching of logic.

"The scornful attitude towards logic on the part of the leaders of some institutions, as revealed by the facts cited above, arose partly from the unsatisfactory increase in the teaching of logic, which in turn is explained by the lack of proper means of organizing systems for the training of specialists. The introduction of logic into the schools and a number of universities in the 1940's was without suitable preparation. The cadres of teachers necessary for this were lacking, as well as suitable teaching materials and plans. The matter was entrusted in most cases to people who knew nothing about the subject." [11]

At the conference the participants took note of the demands made by the Ministry of Education on teachers of logic in the ten-year schools, but pointed out that very little was being done by the pedagogical institutes to properly train these teachers. Recently logic has gradually been removed step by step from various faculties at the pedinstitutes where teachers are trained, until now logic is taught there only by the historical-philological faculties. In fact, the conference recommended that the greatest need in the pedinstitutes was to start some courses in mathematical logic for the faculty themselves, so that they would know something to teach the future teachers.

As was seen above, even Moscow State University did not escape the strong criticism of the conference delegates:

"As a result of the insufficient preparation of students of the philosophy faculty at M.S.U. (which is in reality the only place where any training of specialists in logic is going on) who are specializing in the area of logic, at the end of the course these students find themselves, as a rule, unable to apply their specialty. The following significant data were presented to the conference: in the last four years the philosophy faculty graduated about fifty specialists in logic. Out of these, only a very few are presently working in the area of logic." [12]

"We need specialists of a broad profile, standing on the same level as contemporary scientists. At the present no one is training them anywhere. We are not even systematically training specialists in mathematical logic.

In essence, at the present time we have no organised training of logicians anywhere. For instance, in the philosophy faculty at M.S.U. there is no special department of logic. Every year it is only on the initiative of the faculty itself that any special group of logicians is formed, and even then their curriculum hardly differs from that of the other students."[13]

To rectify this situation, the conference recommended that a special department of logic (analogous to the psychology department) be established within the philosophical faculty at M.S.U. This department would train logicians who would have both a training in philosophy and mathematics, and would be able to do not only theoretical work but who would be skilled in the practical application of logic as well, even in such technical fields as programming logical problems for digital computers. To achieve this goal, the conference submitted the following program for training logicians, a five to five and a half year program which can best be presented in four subsections:

A. In the *first three years,* the logic students would take courses in:

1. *Mathematics:* including courses in number theory, combinatory theory, theory of functions, set theory, theory of algorithms, probability theory and mathematical statistics.
2. *Formal logic and mathematical logic:* the propositional and predicate calculi, plus history of logic.
3. *Linguistics:* including comparative linguistics.
4. *Psychology:* including child psychology, the psychology of speech and the study of mental disorders.
5. *Two foreign languages:* English, plus a choice of one of the following languages: German, French or Polish. (It was noted that most of the contemporary foreign literature on logic was written in these four languages).

B. In the *final two years,* the student would take the following special courses: dialectical logic; the application of the algebra of logic to the theory of relay-contact systems; logical semantics; mathematical linguistics and theory of machine translation; theory of documentation and scientific bibliography; computer programming; foundations of cybernetics and information theory.

C. In addition to the above courses to be taken in the last two years, students would take six to eight special courses, including at least one from each of the following three groups:

1. Theory of structures, theory of models, topology, theory of games.
2. Constructivist mathematical logic, many-valued logic, modal logic, probability logic, combinatory logic.
3. Logical analysis of natural languages; logical and philosophical questions of mathematics, physics, chemistry, biology, astronomy and psychology – courses which would assume previous familiarity with the science chosen.

D. To receive a diploma, a student would be expected to solve some theoretical or applied logical problems of 'moderate difficulty'. The writing of this thesis would mean another half year in addition to the five-year program outlined above.

Because such a training program would involve such widely diversified fields as machine translation and the logic of psychology, the conference stressed that it should be under the auspices of the philosophy faculty rather than, say, the mechanics and mathematical faculty. A similar program for faculty members in an abbreviated version was also recommended by the conference.

At the conclusion of the conference, the following resolutions were adopted:

I. The first was to call to the attention of the Ministry of Higher Education the importance of training teachers in logic and the establishment of the special department of logic at Moscow State University described above.

II. The second decision was to press for a journal and other publications specializing in logic and its applications.

III. The third was to recommend to the Academy of Sciences and the Ministry of Higher Education that they convene a large conference of Soviet logicians.

IV. The final resolution was a list of 36 topics for further logical research.

The recommended topics are too numerous to set forth in detail here, but a résumé of a few is sufficient to indicate the breadth of interest of Soviet logicians.

One of the recommended topics was the explanation of the epistemological significance of such mathematical logical results as Gödel's theorems, Church's theorem, and Tarski's theorem about the inexpressibility, by means of a formal predicate calculus, of truth for the formulae of this calculus.

A number of topics dealt with the relationship between logic and psychol-

ogy, such as the logical structure of judgement and other forms of thought. The philosophy of science was generally the concern of a number of topics, both epistemological and methodological, such as the logical structure of theories, of sciences, and problems of induction. There was even the suggestion of applying logical theory to jurisprudence (proof procedures in court, interpretation of laws, etc.).

A great deal of emphasis was put on such topics in information theory and mathematical linguistics as machine translation, logical analysis of grammatical classification, logical problems of documentation, indexing, and information retrieval in general.

Dialectics was mentioned in only three of the thirty-six topics: Basic results of mathematical logic in the light of materialist dialectics; The concept of 'movement' in dialectical logic and the questions of the reflection of movement, change and development in logic; and, Dialectical investigation of the correlation of formal systems and their interpretations.

There were also a number of topics from Western philosophy in which the sliding scale between 'criticism' *(kritika)*, 'critical analysis' *(kritičeskij analiz)* and plain 'analysis' *(analiz)* can be interpreted for each topic as a measure of the extent to which the official Soviet attitude toward it is no longer hostile:

Kritika of idealistic speculation on the achievements of mathematical logic; *Kritičeskij analiz* of the logical and philosophical conceptions of Ludwig Wittgenstein; *Kritičeskij analiz* of the semantical theories of Rudolf Carnap; and *analiz* of the logical views of Charles Peirce.

II

Although the 1958 conference in Moscow had recommended that frequent logic conferences be organized with representatives from all fields and from the major universities and research centers in the Soviet Union, no tangible action was taken by either the Ministry of Higher Education or the Academy of Sciences to sponsor such conferences. Finally, on the initiative of the logicians at the university in the central Siberian city of Tomsk, the first general conference on logic and methodology of science was organized in 1960. The conference ran from May 21 to May 26, and thirty-three major reports and papers were given. It was attended not

only by logicians, but physicists, mathematicians, linguists, computer technicians and even historians.[14]

Although the bulk of the participants were from Tomsk or other nearby Siberian cities such as Novosibirsk and Stalinsk, there were some competent logicians from Moscow in attendance, notably A. L. Subbotin and A. A. Zinov'ev from the Institute of Philosophy.

In the field of pure formal logic there were two papers. The first, by A. L. Subbotin of Moscow, compared mathematical and traditional logic, concluding that mathematical logic is simply a new phase of formal logic. The characteristic features of mathematical logic are the following: (1) Contemporary logical research uses the method of formalization, which Subbotin interprets as a reflection of logical thought by means of a formal system based on the application of the language of formulae. (2) Contemporary logic is a combination of formal logical systems, each of which is an idealized abstract model of a separate aspect of the logical process. (3) The problem of describing and investigating such systems compels one to exceed the bounds of these systems themselves and turn to informal logical methods – i.e., the metalogics which form an important part of contemporary formal logic. When considered from this point of view, Subbotin feels that traditional logic is a first, but incomplete, formal approach to the study of the laws of thought. Traditional logic set forth only one of these formal logical systems – namely, the syllogism. Its methods were not strict, and it did not distinguish purely technical methods of formal calculi from the methods of metalogic.

The paper by A. A. Zinov'ev (of the Institute of Philosophy in Moscow) considered the problem of quantification in many-valued logic, where the latter is understood as an aggregate of logical calculi in which propositions (arguments and functions) are assigned any finite or denumerably infinite set of truth values. The fundamental problem in constructing a many-valued predicate calculus is the problem of many-valued quantifiers. Classical universal and existential quantifiers bind each variable and convert expressions containing variables into propositions having two values: truth or falsity. But it is possible to introduce quantifiers which would bind only some of the variables and would convert expressions containing variables into many-valued propositions which had one of three (or more) truth-values. Such a type of quantifier is a generalization of the classical type and by no means excludes the latter. According to

Zinov'ev, the problem of universal and particular in classical logic may be considered as part of a more general (and nevertheless richer) problem of quantification in contemporary logic.

There were a number of papers on the application of logic to scientific research. V. A. Smirnov of Tomsk took up several problems concerning the axiomatization of scientific theories, including the construction of metatheories for specific sciences; e.g., metachemistry, metabiology, etc. A. A. Furman, also of Tomsk, gave a report on the axiomatic method in physics, showing that in Hilbert's general physical theory Hilbert had assumed two axioms, one being the principle of 'fixed activity' *(stacionaroe dejstvie)*, the other being the principle of general invariance. To Hilbert these principles seemed purely formal, devoid of any definite physical content. According to Furman, to thus interpret the basic physical axioms is to introduce mathematical idealism and to deprive physics of any kind of scientific foundations. In Furman's opinion, the principle of 'fixed activity' is a general analytic formulation of the law of the conservation and transformation of matter and change, and the principle of general invariance expresses the most general regularities *(zakonomernosti)* of structures of physical systems and their own state of change.

É. N. Rosenberg of Novosibirsk, in a report entitled "Analogy and Problems of Constructing Models", emphasized how little is known about analogies and their function. Rosenberg defended analogy as a necessary constituent of human knowledge which under certain definite conditions permits true conclusions to be drawn. The objective basis of analogy is the objective similarity between objects and the appearances of reality. The significant interest for logic lies in this connection of experience with accumulated 'theories of similarity' and 'theories of the scale of physical magnitudes'. Rosenberg also pointed out that analogies are widely used in contemporary construction of physical and technical models.

A number of papers supported the point of view that the problems of logic included an informal *(soderžatel'nyj)* analysis of thought processes. For instance, V. S. Švyrev of Moscow criticized the so-called 'logic of science' or 'logical analysis of science' found in the works of Carnap, Reichenbach, Popper, Hempel and others.

The 'logic of science' bases its analysis on research of logical relationships of 'ready-made knowledge', with its conditions of truth. Under such

an approach the contents are assumed to be 'given', invariant with relation to logical transformation, i.e., in essence, causes are ignored in the analysis. It attempts to provide 'basic' propositions and 'basic concepts' and to reduce to them all the remaining propositions and concepts, considering such a reduction as a strictly logical problem and therefore having no relationship whatsoever to the meaning stated in the propositions and concepts. However, it was shown that it was impossible to reduce all propositions and concepts to 'basic' ones, or to provide such 'basic' elements. The subsequently proposed hypothetical-deductive conception in turn suggested difficulties unresolvable in principle (the irreducibility of the truth-conditions of scientific statements to empirical truth-conditions and the content of scientific concepts to the contents of sense-perceptions). These difficulties, in Švyrev's opinion, are rooted in the approach to knowledge as 'ready-made', bound by its truth-conditions. Therefore it is necessary to find an alternative approach, which contains a treatment of logic that introduces into its subject the *content* of knowledge and considers this content as a result of logical activity, 'giving birth' to this content on the basis of 'change' in the knowledge of genetically 'lower' levels.

The report of G. P. Šedrovickij of Moscow on "Different Initial Concepts of Formal and Informal Logic" attempted to set forth a system of concepts of informal *(soderžatel'nyj)* logic.

E. D. Smirnova of Tomsk reported on the interpretations given by contemporary 'positivists' to the problem of analytic and synthetic knowledge. She agreed that the division of propositions into analytic and synthetic is correct, but rejected any absolute division, since it held true only in a relatively fixed semantic system. She maintained that the logical empiricists think analytic statements do not convey any information about reality. However, she feels that analytic as well as synthetic meaning is a reflection of reality, but that analytic differs from synthetic in that it is inherent in the very structure of language itself. This confirms the possibility of transforming what is synthetic and factual in one language system into something analytic in another (for an example, she says that the theorems of geometry appear to be synthetic in logic and analytic in geometry).

There were a number of other papers in epistemology and application of logic to computer programming, none of which were of sufficient interest

to report here. There were only two papers on dialectics, one by D. P. Gorskij of Moscow, called "A Dialectical-Materialistic and Metaphysical Approach to the Problem of Identity", the other a paper on "Dialectics as Logic" by P. V. Kopnin of Kiev. Kopnin defined formal logic as a *special* science, with which dialectical logic has essentially the same relationship as it does with other concrete sciences like mathematics, physics, linguistics, etc.

III

The criticisms raised by the first conference certainly should not be interpreted as just another exhibition of Communist *samo-kritika* (self-criticism). Rather, the criticisms are intelligently formulated and directed toward a genuine deficiency which exists in the teaching of logic in the Soviet Union. The significant thing is that these criticisms are made by Russians, not by observers outside the Soviet Union. (In fact, one wishes that French and German philosophers were as aware and self-critical of their own rather appalling deficiencies in logic as the Russians have been). Moreover, the intent of the conference was not only to bring these deficiencies to the attention of the authorities, but to draw up a far-reaching program for improving research and training in logic. The program which they presented is almost staggering in its breadth and thoroughness. It is a far more ambitious program than exists in theWest, with the lone exception of the program in logic and scientific method at the University of California, Berkeley. There are not many theoretical mathematical logicians in the West who are conversant with switching circuits, and few Western computer engineers are familiar with such theoretical work as recursive function theory. Philosophers study logic up through the first-order functional calculus but little more.

Therefore it is not surprising that the program presented by the conference has not been implemented by the Soviet authorities, even though both the criticisms and the proposals were well-received. The Ministry of Higher Education has so far taken no steps to graduate more logic teachers, and the few changes which have taken place at Moscow State University have merely served to raise the level of the mathematical logic courses and to introduce a few specialized courses in logic, rather than to drastically change the philosophy faculty as was originally proposed. Yet unless at least some of the recommendations of the conference are

enacted soon, the Soviet Union will find itself with a definite shortage of logicians, since there is nowhere near a sufficient number being trained to meet the increasing demands.

However, there are now three groups of logicians working on some of the research problems proposed by the conference. The first group works at the Laboratory of Electromodelling *(Laboratorija Elektromodelirovanija)* at VINITI;[15] the second group at the Institute of Automation and Remote-Control *(Institut Avtomatiki i Telemexaniki);* the third group in the Machine Translation Laboratory *(Laboratorija Mašinnogo Perevoda)* at MGPIIJa.[16] As might have been noted above from the first conference's list of research topics on the logical analysis of grammatical classification *(à la* Noam Chomsky), logical problems of documentation and indexing, etc., there is a substantial amount of work being done in the Soviet Union on information retrieval systems, especially at VINITI.

There is a tendency among Soviet logicians, just as among their American colleagues, to justify industrial and governmental support of their subject in terms of its applications. Thus the logic conference at Tomsk emphasized that:

"logic has a good deal of significance for systematic science and technology. Without careful treatment of logical and general methodological problems, successful development of concrete scientific disciplines is impossible. Direct technical problems of automating production, and the development in connection with this of digital computing techniques and remote control open up a broad field of activity for applied logic. Logic can make an invaluable contribution to the improvement and rationalization of the methods of training workers. Finally, *serious decisions in a whole set of ideological questions are impossible without a profound and creative treatment of logical and methodological questions.*"[17]

Many Soviet logicians find themselves seeking support of their basic research in terms of its useful applications. This should not be surprising to Americans at least, since in this respect the Soviet Union tends to take the same pragmatical attitude toward basic research as the United States does. It would seem then, that a Soviet logician must cast his request for support along nearly the same lines that, say, a recursive function specialist in America would adopt in order to obtain a grant from the Office of Naval Research or the Institute of Defense Analyses

– namely that sooner or later his abstract research will prove to be 'useful'. There seems every reason to believe that as more *technological* applications of logic are demanded, there will continue to be an increasing expansion of work in *theoretical* logic in the Soviet Union. Whether or not this will in turn spill over into the realms of philosophy in such a way as to cause a modification of dialectical logic or affect ideology in any way is difficult to predict, although the italicized passage quoted just above would seem to indicate that this is not impossible.

However this may be, several steps have been taken to improve symbolic logic since the first logic conference in Moscow. A journal entitled "Logical Investigations", to appear twice a year, is being prepared by the Institute of Philosophy. A final decision regarding publication of the journal is up to the Praesidium of the Academy of Sciences, and as of the spring of 1962 no announcement has yet been made concerning the journal. Two *sborniki* (collections of articles) on logic have come out since the conference [18] and a third is being prepared on the formalization of scientific theories.

Translation of various Western books on philosophical and mathematical logic continues. Recent translations include Alonzo Church's *Introduction to Mathematical Logic* (translated by V. S. Černjavskij (1960)), and Jan Łukasiewicz's *Aristotle's Syllogistic from the Standpoint of Modern Formal Logic* (translated by A. L. Subbotin and N. I. Stjažkin (1960)). Translations are under way of R. L. Goodstein's *Mathematical Logic,* John Kemeny's *Introduction to Finite Mathematics,* and the logical works of Kotarbiński.

Philosophical translations include Ludwig Wittgenstein's *Tractatus Logico-Philosophicus* (translated by I. Dobronravov and D. Laxuti (1958), with an introduction by V. Asmus and commentary by D. Laxuti, V. Finn, D. Kuznecov and I. Dobronravov) and Rudolf Carnap's *Meaning and Necessity* (translated by N. V. Vorob'ev (1959), edited by D. A. Bočvar, with an introduction by S. A. Janovskaja).

It should not be inferred that Soviet logicians are familiar only with the Western works which have been translated into Russian. As indicated by a number of the papers given at the Tomsk conference, there is both a good deal of knowledge of, and interest in, Western works on logic, even those of a philosophical nature. As was pointed out in part I above, the Soviet acceptance of the semantical theories of Carnap and the logical

ideas of the early Wittgenstein as worthy of *kritičeskij analiz* is an improvement over the previous completely negative attitude. However, it should be pointed out that only the Soviet attitude towards the *logical* aspects of the works of Western philosophers like Russell, Reichenbach, Hempel and Popper has changed. The negative official attitude towards their *philosophical* theories remains unchanged. When Carnap's book was translated into Russian, it created a lively interest among the linguists, but not among the philosophers, and the translaton of Wittgenstein hardly caused a ripple, since most of the specialists already knew the book before it was translated.

Some of the criticism of the logical positivists is now on a level with that of Western critics. Some of what Švyrev said in his paper is reminiscent of Hempel's own criticisms, and Rosenberg's defense of theoretical models is not unlike that of N. R. Hanson, Mary Hesse, E. H. Hutten and the present author. Smirnova's paper on analytic and synthetic contained some critical points similar to those made by W. V. O. Quine in his "Two Dogmas of Empiricism". Instead of the old uncritical, dialectical rejection of logical positivism, the Russians seem to be now producing some respectable criticisms. There is not a great deal in their papers which will seem new to Western philosophers who have long since tired of flogging the positivists, but the appearance of a healthy school of philosophical criticism in the Soviet Union is significant and should not be disregarded.

Moreover, symbolic logic now seems to stand on its own feet without having to apologize to the dialecticians for its existence. Although the long report of the Tomsk conference ended with a three-line complaint that the conference suffered from a lack of papers on dialectical logic, this *obiter dictum* was not voiced by logicians taking part in the conference.

To sum up, these two recent conferences indicate that considerable progress has been made in the field of logic in the Soviet Union since the early 1950's, to the extent that there are now better and more logicians working there than in Continental Europe (with the exceptions of Holland and Poland). There is also considerable evidence that this progress will continue if the authorities take action on some of the recommendations made by the first Moscow logic conference.

REFERENCES

1. The study resulting in this publication was made under a fellowship granted by the Ford Foundation. However, the conclusions, opinions, and other statements in this publication are those of the author and are not necessarily those of the Ford Foundation.
2. The author made two extended visits to the Soviet Union before and after the first conference.
3. Cf. E. K. Vojšvillo, A. V. Kuznecov, D. G. Laxuti, and V. K. Finn: "Neotložnye zadači naučno-issledovatel'skoj i učebnoj raboty v oblasti logiki". *VF* 1959, 3, 175–179.
4. *Ibid.*, p. 175.
5. Cf. V. P. Tugarinov and L. E. Majstrov: "Protiv idealizma v matematičeskoj logike". *VF* 1950, 3, 331–339; also A. D. Aleksandrov: "Ob idealizme v matematike". *Priroda,* 1951, 7, 3–11, and 1951, 8, 3–9.
6. Vojšvillo *et al., loc. cit.*, p. 176.
7. *Ibid.*, p. 176.
8. *Ibid.*, p. 176 (italics added).
9. *Ibid.*, p. 177.
10. *Ibid.*, p. 177.
11. *Ibid.*, p. 177.
12. *Ibid.*, p. 176.
13. *Ibid.*, p. 177.
14. Cf. A. A. Uvarov and G. P. Ščedrovickij: "Konferencija po problemam logiki". *FN* 1961, 1, 198–203; and V. N. Sadovskij and V. A. Smirnov: "Soveščanie po problemam logiki i metodologii nauk". *VF* 1960, 11, 153–158.
15. VINITI = Vsesojusnyj Institut Naučnoj i Texničeskoj Informacii (All-Union Institute of Scientific and Technical Information).
16. MGPIIJa = Moskovskij Gosudarstvennyj Pedagogičeskij Institut Inostrannyx Jazykov (Moscow State Pedagogical Institute of Foreign Languages).
17. Uvarov and Ščedrovickij, *loc. cit.*, p. 198 (italics added).
18. *Logičeskie Issledovanija.* M. Izd. AN SSSR. 1959. 465 pp.; and *Primenenie Logiki v Nauke i Texnike.* M. Izd. AN SSSR. 1960. 559 pp. (both of IF).

L. H. HACKSTAFF / J. M. BOCHEŃSKI

A STUDY IN MANY-VALUED LOGIC

The present study * concerns a recent book by A. A. Zinov'ev [1], a translation of which is forthcoming. The discussion is divided into six parts: I. a summary of the content, II. remarks on the significance of the book in Soviet philosophy, III. unity and multiplicity of logic, IV. interpretation of many-valued systems, V. Zinov'ev's truth-tabular system for intuitionistic logic, VI. conclusions.

I SUMMARY OF THE CONTENT

The book is divided into 5 chapters. Chapter 1 presents general introductory remarks on bivalent logic. Łukasiewicz notation is used, but sometimes the functors – like 'B' for 'NE' – are placed between their arguments (pp. 5–10). In Chapter 2 Zinov'ev introduces the concept of many-valued logic and gives a survey of its early developments (Łukasiewicz, Post, Heyting, Kolmogorov's interpretation and Glivenko's results; Gödel's papers on intuitionistic logic 1932–1933 are not mentioned) (11–28). Chapter 3 briefly sets out some more recent systems (Bočvar 1938, Reichenbach 1944, Šestakov's interpretation 1946–1953, and Ackermann's system of strong implication 1956). The methods of constructing such systems (in particular that of Jablonskij, 1958) are also discussed (29–49). Chapter 4 discusses general issues concerning many-valued logic (completeness, negation, deducibility, etc.) and the unity of logic (50–80; see below, section III). Chapter 5 deals with the problem of interpreted systems (see below, IV) with the relation between logic and dialectics and with the universality of logic (81–103). Chapter 6 is concerned with the problem of quantification in many-valued logic (104–118). A conclusion (119–120), technical complements (121–133) and a bibliography (134–139) follow.

Although Zinov'ev makes no claim to completeness, some recent

* Section II was written by J. M. Bocheński, section V by L. H. Hackstaff, the remaining in collaboration by both authors.

Studies in Soviet Thought II, 1 (March 1962)

developments of significance which he fails to consider are: the many-valued developments of modal logics constructed by a number of logicians, e.g., R. Barkan-Marcus (1946); the ground-breaking work done by Moh-Shaw-Kwei on many-valued set-theory (1954); the construction by Skolem of an arithmetic within a set theory based upon a logic with infinitely many-values (1956). Likewise, Zinov'ev's book does not contain a consideration of the difficulties involved in securing the many-valued systems against the proof in them of many-valued analogues of the so-called logical paradoxes, e.g., many-valued analogues of the Russell, the Burali-Forti, and the Cantor antinomies, to which some many-valued systems are known to be subject.

II MODERN LOGIC AND RECENT SOVIET PHILOSOPHY

The present work seems to be one of the most important contributions to its field – if not to Soviet philosophy as a whole – to emerge from the Soviet Union in recent years. To understand the significance of Zinov'ev's book as an event in Soviet philosophy it is necessary to review developments in Soviet philosophy of logic since 1946.

1. *The decrees of 1946 and 1950.* In November 1946, the Central Committee decreed that logic was to be introduced into the schools (later suspended [2]). On June 20, 1950 Stalin issued his declaration on language. The first sanctioned logic, formal or otherwise (it did not specify), as a separate discipline, while the second permitted, implicitly, the study of *formal* logic.

2. *Since 1950.* Despite the decree of Stalin, the status of *symbolic* or *mathematical* logic in the Soviet Union has been ambiguous. While cultivated in departments of mathematics, (e.g., at the State Universities of Moscow and Leningrad), little of importance in this field emerged from philosophers or even from logicians drawn into philosophical discussion. Contributions to mathematical logic were regarded with some hostility: see, for instance, the attacks on the work of Prof. Janovskaja by P. V. Tugarinov and L. E. Majstrov [3], the logically irresponsible book of A. I. Popov [4], and, perhaps the most illustrative, I. J. Čupaxin's latest work [5], a paradigm of logical confusion. But the situation in the field appears to be improving. While such philosophers as N. I. Kondakov (1954) [6], B. M. Kedrov (1955) [7], and the collaborators of the *Large*

Soviet Encyclopaedia (1954) [8] held that mathematical logic is, at best, the logic of mathematics, since 1955 a number of Soviet thinkers argue that it is formal logic *tout simple*. V. F. Asmus [9] seems to be the first such philosopher to have asserted this thesis. The *Small Soviet Encyclopaedia* (1959) [10] states that mathematical logic has a 'logical nature'. During the same year the Institute of Philosophy of the AN issued a serious work written in collaboration by several philosophers and logicians [11]. In 1960 another such volume was published [12]. In the *Voprosy Filosofii* (since 1956) and in the new *Philosophical Encyclopaedia* [13] one finds a number of competently written articles on mathematical-logical subjects.

3. *Recent developments.* In these more recent works and the work presently under consideration we find that,

i) It is simply taken for granted that mathematical logic is a respectable science, *qua* logic, without apologies or reservations; this is new, i.e., post 1955. Zinov'ev titles his book the problems of many-valued *logic*, not of many-valued *mathematical logic*.

ii) They are free of citations from thinkers whose work in the field has been of no significance.

iii) The level of technical competence in the field exhibited in the present book is of an order very much beyond that customarily found in most works of the sort *both* in the Soviet Union and on the Continent of Europe. We say this in spite of lapses discussed below (cf. particularly section 5).

III THE UNITY AND DIVERSITY OF LOGIC

1. In speaking of 'logic' in this context, Zinov'ev restricts himself to formal logic, considering the relations and differences obtaining between distinguishable contemporary symbolic systems. Further, Zinov'ev is concerned here with *interpreted* systems of symbolic logic, not pure uninterpreted calculi. It is understood that theorems in such systems are statements or statement functions; that the propositional variables occurring in them are to be interpreted as standing for statements, etc.; that the propositional connectives stand for functors having statements as their arguments, etc.

2. Logic is said to exhibit *diversity* in the precise sense that, empirically, there is not just one logical system, but a very large number indeed. Zinov'ev is correct here, as no qualified judge could deny. There exist

in fact a large number of systems of *classical* or *standard* logic, i.e., systems containing, e.g., the formula

$$\text{A. } p \vee \sim p$$

as a theorem. These systems are all equivalent, at least at the level of the propositional and lower functional calculi. But besides systems of standard logic, there are *weakened* systems of logic like that of intuitionism, that of Johannson, and that of F. B. Fitch, which are *not* equivalent with classical systems, and which do not contain A. as a theorem; and there are many-valued systems studied in Zinov'ev's book which are not weakened systems, but *generalized* systems: they are not equivalent with standard logical systems.

3. Zinov'ev's consideration of the 'unity' of formal logic exhibits more originality, though it is not stated with as much precision as Western thinkers have come to expect in discussions of this kind. Formal logic exhibits unity in three related senses:

3.1 *Consistency:* The unity of logic is based on the 'intuition' that scientific theories must be consistent not only within themselves but with each other. Put in somewhat more precise terms, if *P* is a proposition, no logical system may possess as theorems sentences expressing both *P* and *not-P*. Likewise, no two logical systems, S and S′, may be such that S possesses as a theorem a statement expressing *P*, and S′ possesses as a theorem a statement expressing *not-P*. While it is possible to construct a system having as a theorem a statement which is the contradictory of a theorem of the classical two-valued logic, Zinov'ev argues that such a system will be 'empty'. (This appears to mean 'uninterpretable as a calculus'.) Zinov'ev argues that all logical systems, including the many-valued systems, are subject to this norm. Some possess as theorems statements which are not theorems of others, e.g., the Russell-Whitehead *Principia* contains as a theorem

$$\text{B. } [\sim p \supset \sim q] \supset [q \supset p]$$

missing in the intuitionistic calculus of Heyting, but the *Principia* does not have as theorems the denials of any theorems of the Heyting calculus and the Heyting calculus does not contain as theorems the denials of the theorems of the *Principia*. Thus uniform adherence to the norm of consistency is among the hallmarks of all logical systems without excep-

tion. Zinov'ev argues, further, that unless such a norm were taken for granted as applying to all systems, it would be impossible even to speak of relations between formal systems, e.g., that one system is a *generalization of* another, that one is *included in* another, that two systems are *equivalent* or *isomorphic*. (It may be remarked in passing that the force of Zinov'ev's remarks is reduced by a failure to specify clearly under what circumstances a formal system is a *logic*. One wonders whether it would be possible to make such a specification of the meaning of '*interpreted logical system*' without appeal to some concept of consistency, in which case Zinov'ev's remarks would simply reflect the meaning of the term 'logic', thus losing the synthetic and empirical character which Zinov'ev claims for them. Likewise, since work in the many-valued systems is still not advanced much beyond the elementary level of the first order functional calculus, statements concerning the consistency of such systems with the fully articulated bivalent logic, e.g., of *Principia Mathematica,* or Quine's *New Foundations,* must be regarded with some caution.)

3.2 All logical systems are the object of a single kind of inquiry or research. This one domain or research concerns, e.g., the principles of construction of such systems, their relations and differences, their general properties, the properties of specified distinguishable groups of logics, i.e., logics of classical form, logics related to the intuitionistic calculus, logics of many values, etc. Hence, in an Aristotelian way, since formal logics are the object of a single 'science', they exhibit a certain kind of unity.

3.3 Logic is a unity by virtue of 'common basic concepts and principles' illustrated by each properly logical system, e.g., proposition, truth, falsehood, truth-value, deduction. No basic principles are mentioned. (In this connection it is interesting to ask the question, "Are there any object-laws or principles which may be said to be 'essentially logical' such that their absence from a system is sufficient to inform us that the system in question is 'not a logic'?" This question, considered by F. B. Fitch in a sequence of articles on basic logic in the *Journal of Symbolic Logic* [14], presupposes an answer to the basic question left, for the most part, unanswered by Zinov'ev: "Under what circumstances is a system a logic?") In general, Zinov'ev concludes, logic has a unity by virtue of the fact that it is 'the science of the structure of knowledge, deductive knowledge and proof'.

3.4 On the more specific problem of the exact relations between many-

valued and two-valued systems, Zinov'ev poses the following questions:
3.401 Is it possible to construct a many-valued system S, such that the theorems of S include among them the negation of classical two-valued laws?
3.402 Is two-valued logic *sufficient* for the construction of an *n* valued system? Is it *necessary* for the construction of such a system?
3.403 In what sense, if any, are the laws of two-valued logic preserved and in what sense not preserved in *n*-valued systems?
3.41 He gives the following answers:
3.411 For reasons given in 3.1, the answer to question 3.401 is negative. No such system, S, can be constructed unless S is 'empty'.
3.412 Zinov'ev maintains, in agreement with all logicians working in this field, that it is possible to construct *n*-valued systems using formalized systems of two-valued logic. (Some imprecisions result in that Zinov'ev fails to distinguish between the many-valued system under construction as *object-system* and the two-valued meta-system employed in its construction. In general, no distinction is made in the book between object-statements and meta-statements. One wonders how, without this distinction, the semantic antinomies are to be avoided, since no clear alternative method for their avoidance emerges in the text.) He also accepts the generally accepted correlative thesis that any function in a many-valued system may be described by means of statements having two-valued character. Hence two-valued logic is sufficient for the construction of *n*-valued systems. No clearly defined answer to the second subquestion of 3.402 is offered. (Reichenbach (1944) [15] claimed that an infinite-valued system could be articulated within an infinite sequence of many-valued meta-languages. However, it appears that the system in which this result is formulated is two-valued. The state of research at the present time appears to leave the answer to this question undetermined.)
3.413 Zinov'ev answers question 3.403 in the following ways. If the *n*-valued system, S, is a generalization of a standard two-valued system, S′, (i.e., if when $n = 2$ the two-valued system, S′, is obtained), then the denials of the laws of S′ will give the value 'falsehood' for all values of their variables. Even if S is *not* a generalization of *any* classical system, S′, the negation of the laws of S′ are not theorems of S. This is proved by showing that given any S, the denial of a law, *T*, of S′ will not be true for all values of its variables in S, and hence the denial of *T* is not a theorem

of S. It does not follow in this case, however, that *n*-valued analogues of all the theorems of S′ are theorems of S.

3.42 Zinov'ev concludes (pp. 66f): "It follows that the relative character of logical laws should not be understood in a vulgar way, i.e., as subject to rejection under any condition." This conclusion seems to be accepted by most logicians now concerned with the field in the West.

3.43 Zinov'ev also asks whether the functions of *n*-valued logics can be described by means of the logical laws countenanced by 'such scholars who have never studied logic', i.e., scholars who have never bothered to master even the propositional calculus. The answer is predictably negative (p.69).

IV INTERPRETATIONS OF MANY-VALUED FORMAL SYSTEMS

Here again Zinov'ev fails to distinguish between object-linguistic and meta-linguistic levels, though such a distinction would seem *prima facie* useful in a discussion of interpretation.

4.1 The author maintains, with Curry, Fitch, and most other contemporary logicians, that every sentence may be analysed into terms which are symbols for objects (in some sense) and terms which are symbols for their properties or attributes (in some sense). He argues that this is 'an empirical fact' (p. 104). Thus we need not suppose that in his discussion of the interpretation of the many-valued systems he will argue, as did the early Russell with respect to the *Principia,* that these systems introduce fundamentally new modes of sentential analysis.

4.2 Zinov'ev distinguishes two kinds of interpretation for the systems in question. The first appears to be the familiar one of system and objective model, but Zinov'ev changes the usual relation in a strange way. He speaks as follows of the system-objective model method: it consists in establishing 'a correspondence between the elements of logical systems and a concrete objective domain, between the symbols of variables, sentences, truth-values, and sentential functors on the one hand, and objects, their properties and their mutual relations on the other. *In that case, the logical system plays the role of a model for the given objective domain*' [our italics]. Thus, whereas the 'domain of objects' would be thought of by Western logicians as the model of the system, Zinov'ev thinks of the system as the model of the 'objective domain'. While the terminology is confusing, it seems clear that the Soviet logician intends no dramatic

innovation here, since, despite his curious reversal of the usual notion of the system-model-object relation, the 'domain of objects', remains the locus of interpretation for the system.

4.3 The second kind of interpretation is outlined in the following quotation. 'Another kind of interpretation may be understood which is based on the definition of truth-values in which the concrete nature of one or another concrete domain is not taken into account, the terms (symbols in general) corresponding to truth-values being defined as concepts which characterize the process of knowledge.' In the opinion of the reviewers, Zinov'ev's discussion of this mode of interpretation and its distinction from the first is not sufficiently clear to allow fruitful discussion or criticism. As an example of the first mode of interpretation, the work of Reichenbach and Destouches is cited, of the second the Tarski paper of 1952.

4.4 In general the reviewers would suggest that the discussion on interpretation in Chapter 5 is vitiated by the fact that the many-valued logics remain, for the most part, at a comparatively undeveloped stage (cf. 3.1). Until their properties are more fully known and until they are developed beyond the present level, a cautious thinker is obliged to retain reservations about various proposed interpretations, since the judgment concerning the viability of the latter rests upon the former. Zinov'ev's illustrative interpretations are given in terms of many-valued propositional calculi. But the most interesting features – and problems – arise at a level of the first and higher order functional calculi, e.g., the logical antinomies and the like. The author gives as an illustration Reichenbach's work using quantum mechanics as model for his many-valued system of 1944. But, for reasons which limitations of space forbid us to include here, difficulties with respect to the necessity and sufficiency of his interpretations have led most qualified judges to regard Reichenbach's effort as unsuccessful. While it is not the reviewers' intention to condemn Zinov'ev, and others, for engaging in this kind of speculative activity, none the less, they are obliged to suggest that this enterprise is somewhat premature.

V ZINOV'EV'S TRUTH-TABULAR SYSTEM FOR INTUITIONISTIC LOGIC

In two papers published in 1932 and 1933, Kurt Gödel presented a

number of results concerning the logic of Intuitionism.[16] Among these was the result that there is no set of truth-tables with a finite number of truth-values such that, a) all formulae which are theorems of the intuitionistic propositional calculus are tautologies according to the tables, and b) all formulae which are tautologies according to the tables are theorems of the intuitionistic propositional calculus.

In Chapter 2, Zinov'ev constructs (pp. 22f) a system of three-valued truth-tables which are supposedly sufficient to represent the intuitionistic propositional calculus: equivalents of the system of tables he gives are presented below: where 1 is the value 'truth', 0 the value 'falsehood', and $\frac{1}{2}$ the intervening 'tertium' value between 1 and 0.

Truth-tables for intuitionistic logic:

	negation					implication	disjunction	conjunction
	p	¬ p		p	q	p → q	p ∨ q	p ∧ q
1	1	0	1	1	1	1	1	1
2	0	1	2	1	0	0	1	0
3	$\frac{1}{2}$	0	3	1	$\frac{1}{2}$	$\frac{1}{2}$	1	$\frac{1}{2}$
			4	0	1	1	0	0
			5	0	0	1	$\frac{1}{2}$	0
			6	0	$\frac{1}{2}$	1	1	0
			7	$\frac{1}{2}$	1	1	1	$\frac{1}{2}$
			8	$\frac{1}{2}$	0	0	$\frac{1}{2}$	0
			9	$\frac{1}{2}$	$\frac{1}{2}$	1	$\frac{1}{2}$	$\frac{1}{2}$

The tables for disjunction and conjunction are identical with those of the Łukasiewicz three-valued system of 1920 [17]; but Łukasiewicz has the value $\frac{1}{2}$ for the denial of p in row 3 of the table for negation, and has the value $\frac{1}{2}$ for the implication between p and q in row eight of the table for implication. The 'Strong three-valued tables' of Kleene [18] are identical with those of Łukasiewicz for conjunction, disjunction and negation,

but distinct from both that of Łukasiewicz and that of Zinov'ev for implication; Kleene has $\frac{1}{2}$ as the value of the eighth row and $\frac{1}{2}$ as the value of the ninth row. Thus Zinov'ev's system is not equivalent with either of these systems.

It can be shown that all the theorems of the intuitionistic propositional calculus are tautologies using Zinov'ev's tables, but the converse, i.e., that all Zinov'ev's truth-table-tautologies are theorems of the intutionistic calculus of propositions, is false. Hence the tabular system of Zinov'ev is not equivalent with the intuitionistic propositional calculus, e.g., the Heyting system [19], hereafter called P_H.

The theorem of P_H

$$\neg\neg[p \vee \neg p]$$

is verified as a tautology by the Zinov'ev tables as follows:

	$\neg$	$\neg$	$[p$	$\vee$	$\neg p]$
1	1	0	1	1	0
2	1	0	0	$\frac{1}{2}$	$\frac{1}{2}$
3	1	0	$\frac{1}{2}$	$\frac{1}{2}$	0

The table shows that the theorem is a tautology, since there are none but 1's under the main functor of the formula, the initial negation sign.

The expressions

$$p \vee \neg p$$

$$\neg\neg[p \rightarrow p]$$

whose analogues are theorems of the classical propositional calculus are – correctly – not truth-table tautologies in Zinov'ev's system – as they are not theorems of P_H.[20]

However, the system fails in the case of the formula

$$[\neg[p \wedge q]] \rightarrow [\neg p \vee \neg q]$$

The table for this formula is as follows:

	[¬ [p ∧ q]] → [¬ p	v	¬ q]
1	0 1 1 1	1	0 (1)	0	0 (1)
2	1 1 0 0	1	0 (1)	1	1 (0)
3	0 1 ½ ½	1	0 (1)	0	0 (½)
4	1 0 0 1	1	1 (0)	1	0 (1)
5	1 0 0 0	1	1 (0)	1	1 (0)
6	1 0 0 ½	1	1 (0)	1	0 (½)
7	0 ½ ½ 1	1	0 (½)	0	0 (1)
8	1 ½ 0 0	1	0 (½)	1	1 (0)
9	0 ½ ½ ½	1	0 (½)	0	0 (½)

Thus this formula is a truth-table tautology by Zinov'ev's system. But the formula is not a theorem of P_H[21], or of any other intuitionistic system. Hence the system resulting from the Zinov'ev tables is not equivalent with P_H.

VI ZINOV'EV'S CONCLUSIONS

The main philosophical conclusions of the book are summarized by the author in the following two theses: (1) many-valued logic does not reject in any meaning of the word the principles of classical logic and does not enter into contradiction with them; (2) many-valued logic is not dialectics nor any of its parts (p. 119). In the text we find other relevant conclusions: many-valued logic is said to have dealt a blow to apriorism in logic (p. 70); in the foundations of logic we find some empirical observations and considerations. But little is done in order either to clarify the meaning of 'emprirical' or to establish the empiricist doctrine which seems to be assumed here. Another interesting statement is the concluding remark (p. 120), in which Zinov'ev ascribes to formal logic the status of a philosophical discipline, yet, he admits that a philosopher can consider it in exactly the same way as he does other, non-philosophical, disciplines.

The results are relevent not only for the philosophy of many-valued systems, but for general philosophy of logic as well. On the whole, in spite of its weaknesses, it is a stimulating book which may be read with profit by any philosopher.

REFERENCES

1. A. A. Zinov'ev: *Filosofskie problemy mnogoznačnoj logiki.* IF. Izd. AN SSSR. 1960. 139 pp. (English translation to be published by D. Reidel, Dordrecht).
2. Cf. E. Kol'man in *Logičeskie Issledovanija.* 1959. p. 16.
3. "Protiv idealizma v matematičeskoj logike". *VF* 1950, 3, 331–339.
4. *Vvedenie v matematičeskuju logiku.* Izd. LGU. 1959. Cf. the review signed by P. S. Novikov, A. S. Markov and S. A. Janovskaja in *VF* 1960, 12, 159–162.
5. *Voprosy teorii ponjatija.* Izd. LGU. 1961, especially pp. 95–138.
6. *Logika.* M. 1954. p. 481b.
7. *VF* 1955, 2, 66.
8. *BSE*, 2d ed. 1954. vol. 25, 338b.
9. In: *Voprosy logiki.* IF. Izd. AN SSSR. 1955. p. 192f.
10. MSE, 3d ed. 1959. vol. 5, 665f.
11. *Logičeskie issledovanija.* IF. Izd. AN SSSR. 1959.
12. *Primenenie logiki v nauke i texnike.* IF. Izd. AN SSSR. 1960.
13. *Filosofskaja Énciklopedija.* I. IF, Izd. Sov. Énciklopedija. 1959.
14. *J.S.L.*, vol. 7 (1942); vol. 13 (1948); vol. 14 (1950); vol. 15 (1950).
15. "Bertrand Russell's Logic", in *The Philosophy of Bertrand Russell.* P. A. Schilpp (ed.) N.Y. 1944, p. 46.
16. "Zum intuitionistischen Aussagenkalkül". *Akademie der Wissenschaften in Wien, Mathematisch-naturwissenschaftliche Klasse, Anzeiger,* vol. 69 (1932) pp. 65–66. and "Zur intuitionistischen Arithmetik und Zahlentheorie", *Ergebnisse eines mathematischen Kolloquiums,* Heft 4 (1933) pp. 34–38. (The first paper was reprinted in the *Ergebnisse,* the same volume as above, p. 40.)
17. "O logice trójwartościowej" (On Three-Valued Logic), *Ruch filozoficzny,* vol. 5 (1920) pp. 169–171. (Cf. Lewis and Langford: *Symbolic Logic.* (1932) pp. 213ff. for an exposition.)
18. Stephen C. Kleene: *Introduction to Metamathematics.* 1952. p. 334.
19. A. Heyting: *Intuitionism.* 1956. p. 97f.
20. *Ibid.*, p. 99.
21. *Ibid.*, p. 100.

SIEGFRIED MÜLLER-MARKUS

DIE ORGANISATION DER SOWJETISCHEN PHILOSOPHIE DER PHYSIK

seit Dezember 1960

Mit der Allunionskonferenz über philosophische Probleme der modernen Naturwissenschaft im Oktober 1958 in Moskau kam die sowjetische Naturphilosophie in vollen Fluss. Die sowjetischen Naturwissenschaftler, vornehmlich die Physiker, legen das Fundament des technischen Machtpotentials der Sowjetunion; ihnen musste daher schon unter Stalin eine gewisse Meinungsfreiheit zugebilligt werden. Heute verlangen sie energisch eine Anpassung des Diamat an das neue Weltbild. So wurde beim Präsidium der Akademie der Wissenschaften der UdSSR (im folgenden AN) ein eigener Wissenschaftlicher Rat für philosophische Fragen der Naturwissenschaft eingerichtet*; an den meisten Instituten der AN bestehen philosophische Seminare.

1. BESCHLÜSSE. Durch Beschluss des Präsidiums der AN v. 11.1.1961 wurde ein Zentralbüro der philosophischen (methodologischen) Seminare der AN geschaffen. Der Beschluss geht ausdrücklich auf das Vermächtnis Lenins zurück, den Bund zwischen Philosophie und Naturwissenschaft zu stärken.[1] Das Zentralbüro besteht aus den Abteilungen Physik und Mathematik, Chemie, Geologie und Geographie, Biologie; es zählt 16 Mitglieder. Direktor wurde I. V. Kuznecov, Stellvertreter des Direktors N. F. Ovčinnikov, Sekretär Ju. P. Trusov. Kuznecov zählt zu den reaktionärsten Sowjetphilosophen; er leugnete von 1951–1955 zusammen mit Maksimov die Relativitätstheorie im Namen des Diamat, nahm allerdings nach dem Sturz Maksimovs bei der Anerkennung der Theorie 1955 dessen Stelle als Redaktionsmitglied der Voprosy Filosofii (im folgenden VF) ein (s. Müller-Markus: *Einstein und die Sowjetphilosophie,* Bd. 1, Dordrecht 1960, S. 318 f.). Ovčinnikov ist Fachmann für das Problem von Masse und Energie, seine frühere reaktionäre Haltung wurde seit 1957 durch eine gemässigt-fortschrittliche ersetzt.
Am 10.3.1961 fand die erste Sitzung statt. Es wurden folgende Ziele gestellt: (1) Lenkung und Koordinierung der naturphilosophischen

* Erstmals erwähnt in VF 1960, 8, 163.

Studies in Soviet Thought II, 1 (March 1962)

Forschung an den methodologischen Seminaren der AN, (2) Hebung des philosophischen Niveaus der Naturwissenschaftler der AN, (3) Herausgabe wertvollen Diskussionsmaterials der Seminare, (4) Vorbereitung vereinigter theoretischer Konferenzen der Seminare über folgende Problemkreise: Zusammenwirken der Wissenschaften beim Studium der Erde, Methodologie der Kybernetik, Wechselwirkung von Physik, Chemie und Biologie bei der Lebensentstehung, Rolle der Wissenschaft in der Gesellschaft. Derzeit bestehen in Moskau etwa 50 methodologische Seminare der AN, mit ihnen hat das Zentralbüro bereits Kontakt aufgenommen (VF 1961, 6, 152–153).*

Nach einem Bericht von I. I. Lejman und A. S. Mamzin bestehen seit über 10 Jahren methodologische Seminare an den Leningrader Instituten der AN. Schwerpunkt der Forschung sind die sog. 'Wachstumsspitzen' der Wissenschaft, wie die philosophischen Grundlagen der Kybernetik, diskutiert am Institut für Geschichte der Naturwissenschaft und Technik, philosophische Probleme der Logik und deren Anwendung bei der Automation am Institut für Elektromechanik, kybernetische Methoden und Evolutionslehre am Biologischen Institut, Entwicklungsperspektiven kosmologischer Theorien am Astronomischen Hauptobservatorium in Pulkovo, philosophische Probleme der speziellen und allgemeinen Relativitätstheorie am Institut für Theoretische Astronomie. Im allgemeinen finden gemeinsame Sitzungen der Seminare mehrerer Institute statt, wie etwa zum Verhältnis der physikalischen, chemischen und biologischen Bewegungsformen in Pavlov-Institut für Physiologie gemeinsam mit dem Institut für hochmolekulare Verbindungen und den biologischen Instituten Leningrads. Besondere Bedeutung kommt der Methodologie einer Einzelwissenschaft zu; dazu zählen die Probleme: Grundbegriffe und Kategorien, Gegenstand und Methode, Beziehung zu Grenzgebieten und zur Philosophie. So diskutierten das Institut für hochmolekulare Verbindungen und das Radium-Institut das erkenntnistheoretische Wesen des physikalischen und des chemischen Experiments, das Institut für hochmolekulare Verbindungen die Rolle der Intuition in der wissenschaftlichen Forschung und das Institut für Elektromechanik Analogie und Modell als Forschungsmittel. Dem Kampf gegen den Idealismus in der heutigen Wissenschaft gelten Themen wie Gamow's *Creation of the Universe* und die Expansionstheorie von

* Nach VF 1959, 10, 143 gibt es in Moskau 56 Seminare.

Lemaitre, die am Astronomischen Hauptobservatorium behandelt wurden. Die Arbeit der Seminare leidet jedoch an zwei Extremen: Zum ersten bewegen sie sich zuweilen auf dem Niveau von Zirkeln der Parteischulung, deren Aufgabe ja die Vermittlung der Grundlagen des Marxismus-Leninismus und nicht die schöpferische Weiterführung von Einzelproblemen ist. Zum anderen wird oft rein äusserlich eine philosophische Terminologie in Fachprobleme hereingetragen bzw. offen die philosophische Problemstellung durch ausgesprochen empirische Einzelprobleme ersetzt.
Im Mai 1961 wurden am Leningrader Gebietskomitee der KPSS diese Mängel besprochen; dazu kamen noch Fälle von Objektivismus und Versöhnlichkeit gegenüber dem Idealismus, Schwierigkeiten bei der Themenplanung und mangelndes Interesse der Jugend an den Seminaren. (VF 1961, 10, 151–153).

2. THEMENKREISE. Interessant ist das Spektrum der Themen in den Jubiläumsbänden zum 90. Geburtstag Lenins und zugleich 50-jährigen Erscheinen seines philosophischen Hauptwerks *Materialismus und Empiriokritizismus*. Dem Realitätsproblem in der Physik sind zwei Aufsätze gewidmet: I. K. Grigonis: "V. I. Lenin und das Realitätsproblem in der modernen Physik", wo die Rolle des Geräts in der Quantenmechanik behandelt wird, und B. Ja. Pachomov: "Die philosophische Kategorie der Materie und einige Fragen der Physik" mit einer Kritik des positivistischen Beobachtungspostulats. Der Objektivität von Raum und Zeit gilt Ju. B. Rumer und M. S. Ryvkin: "Die Einheit von Bewegung, Raum und Zeit im Lichte der heutigen Physik". Drei Aufsätze gelten der Rolle der Mathematik in der heutigen Naturwissenschaft.: D. A. Dobrotin: "Das Buch V. I. Lenins 'Materialismus und Empiriokritizismus' und die Grundfrage der Philosophie in der Mathematik", I. M. Fišman: "Zur Frage der Rolle der mathematischen Abstraktionen in der Wahrheitserkenntnis" und N. A. Kiselëva: "Das Buch V. I. Lenins 'Materialismus und Empiriokritizismus' – die schärftste Waffe im Kampf gegen den 'physikalischen' Idealismus". Ebenso behandeln drei Aufsätze die von Lenin proklamierte 'Unerschöpflichkeit der Materie in die Tiefe', nämlich F. D. Mirošničenko: "Einige Tatsachen der modernen Physik im Lichte der Leninschen Lehre von der Unerschöpflichkeit der Materie', S. T. Meljuchin: "Das Leninsche Prinzip der Unerschöpflichkeit der

Materie und die moderne Physik" sowie V. N. Rudakov: "Der Leninsche Materiebegriff und das Problem der Einheit von Feld und Stoff". Ein Aufsatz ist dem Verhältnis von dynamischen und statistischen Gesetzen in der Quantenmechanik gewidmet, nämlich V. Ja. Bljumberg: "Einige methodologische Fragen der Quantenmechanik im Lichte des Leninschen philosophischen Erbes". (VF 1961, 4, 165–169).

Ein bemerkenswertes Ereignis ist die Wiederaufnahme der *Diskussion über die Relativitätstheorie.* Sie war nach der offiziellen Anerkennung 1955 vorübergehend verstummt, bis A. D. Aleksandrovs glänzender Beitrag auf der Allunionskonferenz über philosophische Probleme der modernen Naturwissenschaft 1958 zeigte, dass man nach der Beseitigung des ideologischen Wustes der Angriffe auf Einstein gerade am Tor zur eigentlichen philosophischen Problematik der Theorie angekommen war. Baženov und Sačkov verlangen nun, offenkundig von anderen Gelehrten ermutigt, 1961 eine Wiederaufnahme der Diskussion angesichts des immer noch herrschenden scharfen Kampfes um die logische Ableitung der Theorie. Darin sind nach Meinung der Verfasser die wichtigsten und zugleich schwierigsten philosophischen Fragen angeschnitten. Als Themenplan wird angeregt: Experimentelle Grundlagen, logischer Aufbau und Grundbegriffe (wobei die subjektivistische Deutung immer mehr an Boden verliere und, wie die Allunionskonferenz 1958 zeigte, in der UdSSR überwunden sei), die Relativitätstheorie als physikalische Theorie der Raumzeit, Zusammenhang von Masse und Energie, das Kausalitätsproblem in der speziellen Relativitätstheorie, das Problem der Raumzeit in der allgemeinen Relativitätstheorie. (VF 1961, 2, 133–137).

Wie sehr sich die zu erwartende Diskussion von der früheren unterscheiden wird, zeigt der Fall von A. K. Maneev: *Zur Kritik der Begründung der Relativitätstheorie*, Minsk 1960. Es wurde am 12.12.1960 auf einer Sitzung des Sektors für philosophische Fragen der Naturwissenschaft am Institut für Philosophie der AN Moskau (im folgenden IF) heftig angegriffen; in der Resolution der Sitzung heisst es u.a., das Buch sei auf Grund der 'total irrigen Haltung geschrieben, die wichtigsten Errungenschaften der Physik zu leugnen; der Verfasser beging äusserst schwere philosophische und physikalische Irrtümer, die das theoretische Niveau des Buches so niedrig machen, dass es sich als nicht den Aufgaben und Interessen einer schöpferischen Diskussion der Probleme der Wissenschaft gewachsen erwies. Dass das Diskussionsergebnis auf 13½ Seiten

der VF veröffentlicht wurde, zeigt, dass es sich offenbar heute kein Philosoph mehr leisten kann, im Namen des Diamat evident falsche physikalische Ansichten zu vertreten. Besonders ist die neue Haltung I. V. Kuznecovs bemerkenswert, der sich ja seinerzeit selbst eklatanter Irrtümer in seinem Wüten gegen Einstein schuldig gemacht hatte. Auf der o.g. Sitzung nannte er nun die Relativitätstheorie 'eine der wertvollsten Errungenschaften der modernen Naturwissenschaft', dies leugne Maneev, indem er zur Newtonschen Konzeption eines absoluten Raums und einer absoluten Zeit zurückkehre. (VF 1961, 6, 139–152). In *Uspechi Fizičeskich Nauk*, t. LXXIV, vyp. 4, 1961, str. 757–759 wurde Maneevs Buch als 'Sammlung von Absurditäten' bezeichnet, die dem Ansehen der sowjetischen Wissenschaft schade.

3. KONFERENZEN. Im *März 1961* fand am IF eine *Allunions-Koordinationskonferenz über Fragen der Philosophie* statt. Sie galt weitgehend der naturphilosophischen Problematik. Der Direktor des IF, Fedoseev, verlangte ein schöpferisches Zusammenwirken zwischen Philosophen und Praktikern sowie eine Team-Arbeit an den philosophischen Instituten. A. F. Okulov wies auf den gewaltigen Anstieg der philosophischen Literatur in der UdSSR zu aktuellen Fragen seit 1959 hin. Fast alle Konferenzteilnehmer sprachen von der naturphilosophischen Forschung in den Unionsrepubliken. Nach V. A. Serbent (Weissruss. Akademie der Wiss.) bildete Maneevs Buch den Anlass für eine Absprache zwischen den weissrussischen Philosophen und Naturwissenschaftlern, sich gegenseitig alle naturphilosophischen Manuskripte vor dem Erscheinen zuzusenden. Kedrov und I. A. Macevičus (Litauische Akademie der Wiss.) verlangten die Behandlung naturphilosophischer Einzelprobleme auf künftigen Koordinationskonferenzen. Nach I. I. Matveenkov (Sibirische Abteilung der AN) gelten die Koordinationsforschungen der sibirischen Philosophen sowohl der kommunistischen Erziehung der Werktätigen als naturphilosophischen Fragen; 1959 wurde in Krasnojarsk eine Tagung über das philosophische Erbe Lenins abgehalten. Die Konferenz beschloss folgende Richtungen bei der Koordination der Wissenschaften einzuschlagen: (1) Entwicklungsgesetze der kommunistischen Gesellschaft, (2) kommunistische Massenerziehung einschliesslich Ethik, Ästhetik und Atheismus, (3) Theorie der materialistischen Dialektik und Logik, (4) Naturphilosophie, (5) Geschichte des Marxismus, (6) Kritik an der bürgerlichen

Philosophie und am Revisionismus. (VF 1961, 7, 145–151). In dieser Reihenfolge kommt offenkundig ein Kompromiss zwischen der parteiamtlichen Forderung nach Massenbeeinflussung (Punkte 1 und 2) und dem Streben der Naturwissenschaftler nach einem praktikablen Diamat (Punkte 3 und 4) zum Ausdruck.

Einer analogen Thematik war die *Allunionskonferenz der Wissenschaftler vom 12.–14.6.1961 im Kreml* gewidmet. Es wurde über die effektive Hilfe der Wissenschaft für die Produktion diskutiert; auch hier traten naturphilosophische Probleme zutage. Der Präsident der AN, Keldyš, hob den Wert der wachsenden Zusammenarbeit zwischen Philosophen und Naturwissenschaftlern hervor. Zentrale Aufgabe ist nach Keldyš die Kernforschung. Der Leitartikel der VF 1961, 7 sieht darin die 'ausserordentliche Aktualität' der derzeitigen Arbeit an der philosophischen Durchdenkung dieser Probleme; dabei stehen die methodologischen (gemeint sind die philosophischen) Probleme der Theorie der Elementarteilchen im Vordergrund, wie Zusammenhang und Umwandlung der Teilchen, Formen der kausalen Wechselwirkung in der Mikrophysik, Zusammenhang von Raum, Zeit und bewegter Materie, Kontinuität und Diskretheit in der Mikrophysik, die Natur der Quantenstatistik, die Beziehungen von dynamischen und statistischen Gesetzen, Unterschied und Zusammenhang der 'Materiearten' Feld und Stoff, das Objektive und Subjektive in der Mikrowelt.

P. N. Fedoseev beklagte, dass die Geisteswissenschaften vornehmlich Phänomene interpretierten, aber für Wirtschaft, Erziehung und Kultur bisher noch wenige wesentliche Vorschläge brächten. Andererseits seien philosophische Ideen wie die Atomistik, die Evolution und die Leninsche Unendlichkeit in die Tiefe ihrer naturwissenschaftlichen Bestätigung weit vorausgeeilt. Die wachsende Verflechtung der einzelnen Naturwissenschaften ist nach Fedoseev das Resultat eines tiefen Eindringens der Vernuft in die Dialektik der Natur [2]. Im Zusammenhang der Wissenschaften spiegelt sich dabei der Zusammenhang der realen Erscheinungen; damit stellt sich das Problem der Einheit der Welt und der qualitativen Eigenart ihrer Regionen. Daran wiederum knüpft sich das grosse Problem einer einheitlichen Basis wissenschaftlichen Erkennens und der spezifischen Eigenarten von Gegenstand und Methode der Einzelwissenschaften. "Man muss zugeben, dass die Philosophie diese Probleme ebenso wie andere wichtige philosophische Probleme der modernen

Naturwissenschaft nur schwach durchdenkt." (VF 1961, 7, 18). Hauptaufgabe ist nach Fedoseev die Koordination der Wissenschaften. Zwar meinen einige Gelehrte, die Erfolge der Physik zeigten, dass alle Naturerscheinungen durch die Physik erschöpft würden, aber weder die Chemie noch die Biologie lassen sich auf die Physik reduzieren, wenn sie auch keine 'Verbotszonen' für den Physiker darstellen. "Die Philosophen und Naturwissenschaftler müssen aktiver die Probleme der Theorie und Logik der wissenschaftlichen Erkenntnis durchdenken, an denen heute die bürgerliche Philosophie, vor allem der logische Positivismus, parasitiert." (VF 1961, 7, 20). Dabei soll man zwar gegen die bürgerliche Ideologie und die Verdrehung des Marxismus-Leninismus einen unversöhnlichen Kampf führen, denn der Gelehrte kann im Kampf des Fortschritts gegen die Reaktion, des Materialismus gegen den Idealismus, der Vernunft gegen den Aberglauben, nicht neutral bleiben[3]; aber die Formen dieses Kampfes können nicht auf schöpferische Diskussionen innerhalb der Sowjetwissenschaft angewandt werden; dort soll eine vernünftige, prinzipielle, aber freundschaftliche und der Wahrheitsfindung gewidmete Kritik herrschen. (VF 1961, 7, 3–24).[4]

Abgesehen von den genannten grossen Konferenzen gab es eine Reihe von Einzelkonferenzen. Vom 1.-3. 12. 1960 fand an der Moskauer Universität (im folgenden MGU) eine *Konferenz über philosophische Fragen der Physik* statt unter Teilnahme von Dozenten, Assistenten ('Aspiranten') und Studenten der philosophischen, physikalischen und chemischen Fakultäten. Diskutiert wurden u.a. die Philosophie der Quantenmechanik und der Ort des dialektischen Widerspruchs in physikalischen Theorien. Dozent N. V. Vorob'jëv polemisierte gegen Philipp Franks *Philosophy of Science.*[5] Dort habe Frank trotz seiner Ablehnung der Metaphysik das Wasserstoffatom als Produkt geistiger Kräfte und den Übergang eines Elektrons auf eine neue Umlaufbahn als freien Willensakt bezeichnet, was eine subjektiv-idealistische Deutung naturwissenschaftlicher Probleme darstelle. Die Physik und insbesondere die Quantenmechanik kennt deshalb nach Vorob'jev nur die Wahl zwischen Diamat oder positivistischem Idealismus.[6] Prof. Ja. P. Terleckij wies auf die zunehmende Abwendung der heutigen Physiker von der Kopenhagener Schule hin. Viele Naturphilosophen gelangten jedoch, vom Positivismus enttäuscht, zu einem objektiven Idealismus; dadurch sei auch das 'riesige Interesse an der Religion' in bestimmten

Kreisen der französischen Intelligenz zu verstehen. Terleckij schlug seine eigene Deutung der Quantenmechanik vor, wonach man zum materialistischen Ausgangspunkt die objektive Existenz eines Subquantenfelds nehmen müsse. A. P. Pozner kritisierte das Komplementärprinzip als eine Folge der negativen Seiten des ursprünglichen Bohrschen Atommodells, in dem klassisch-mechanische mit neuen Formen und Methoden des Denkens vereinigt sind. Das Komplementärprinzip wird nach Pozner von der Kopenhagener Schule fälschlicherweise mit der Unbestimmtheitsrelation gleichgesetzt. Prof. M. I. Šachparonov (chemische Fakultät der MGU) und I. S. Alekseev (physikalische Fakultät der MGU) verlangten, die formale Komplementarität durch die 'positive logische Methode' der Einheit und wechselseitigen Durchdringung widersprüchiger Seiten zu ersetzen. Nach Šachparonov lässt sich an faktischem Material zeigen, [7] dass die Widersprüche die Quelle des Übergangs in das Gegenteil sind und somit die Grundursache der Entwicklung der Dinge darstellen; in diesem Sinne ist der Widerspruch die wesentlichste Kennzeichnung des Gesetzes. Die Entdeckung von Gesetzen ergibt sich aus dem Studium der mit der Wirkung dieser Gesetze untrennbar zusammenhängenden Widersprüche. I. S. Alekseev schlug vor, unter 'Determinismus' nur die eindeutige dynamische Form der Kausalität zu verstehen, wobei unter den reicheren Begriff der Kausalität sowohl dynamische als statistische Gesetze fallen, denn die klassische Physik sah in statistischen Gesetzen die Folge unseres Nicht-Wissens, während in der Quantenmechanik ein komplizierterer Zusammenhang zwischen Anfangs- und Endzustand herrscht. Es handelt sich hier um eine Anreicherung der Kategorie 'Kausalität' gegenüber ihrem dialektischen Moment des Determinismus. [8] Nach Solgalov (philosophische Fakultät MGU) sind die Regulierungsmethoden der Divergenzen in der Quantenelektrodynamik nicht durch formale Fehler, sondern durch die Lösung dialektischer Widersprüche hervorgerufen. Es ist deshalb interessant, einmal den Ausgangssinn der Symbole in den mathematischen Voraussetzungen umzuinterpretieren, wobei man von der Struktur des Widerspruchs selbst ausgeht; dadurch kann die bereits von Hegel zurückgewiesene Haltung widerlegt werden, wonach der Widerspruch weder darstellbar noch denkbar sei (FN 1961, 3, 192–193).[9]

Vom *10.-13. 1. 1961 fand in Kiev eine Konferenz* mit dem Thema 'Der dialektische und historische Materialismus als philosophische Grundlage der modernen Wissenschaft' statt. P. V. Kopnin, gab hier eine interessante

Definition von 'Weltanschauung'. Diese ist kein Wissen von der Welt als ganzer, was ja durch die Ewigkeit und Unendlichkeit der Welt ausgeschlossen wird, sondern vielmehr "ein System von Ansichten, welches zum Inhalt hat die Lösung der Grundfrage der Philosophie, die Deutung des Wesens, der Quellen und der Grundformen der Entwicklung, das Begreifen der Gesetzmässigkeiten der gesellschaftlichen Entwicklung und die Beziehung zum gesellschaftlichen Fortschritt." (FN 1961, 3, 189).[10] Die Weltanschauung ist dabei sowohl ein Reflex der sozialen Verhältnisse als der objektiven Gesetzmässigkeiten, während die wissenschaftliche Methode nur die letzteren widerspiegelt. Weltanschauung und Methode stehen in einem Wechselwirkungsverhältnis. Nach I. P. Golovacha bilden die Einzelwissenschaften die empirische Grundlage der Formierung und Entwicklung der dialektisch-materialistischen Weltanschauung und wirken somit auf die Philosophie; diese beeinflusst umgekehrt die ersteren in 3-facher Weise: (1) Als theoretische Grundlage ihrer Grundbegriffe, (2) als Vorbild für das Operieren mit diesen Begriffen und (3) als allgemeine Methodologie. Nach A. Z. Golik (Universität Kiev) bilden die statistischen Gesetze gegenüber den dynamischen eine tiefere Erkenntnisetappe von den Zusammenhängen der Wirklichkeit und können keineswegs auf sie reduziert werden, obwohl sie mit ihnen zusammenhängen. A. M. Golub unterscheidet bei jeder Wissenschaft (1) das materielle Gerüst der Fakten und (2) den theoretischen Überbau; dieser hängt von der herrschenden Philosophie ab. Eine heftige Diskussion entbrannte um die Frage, ob man heute noch von einer 'Krisis der Physik' sprechen könne, wie sie Lenin 1909 annahm. Prof. A. Z. Žmudskij,[11] und 8 andere Teilnehmer sprachen sich dagegen aus, 7 Teilnehmer, also die Minderheit, dafür. (FN 1961, 3, 189–191).

Vom 1.-4. 2. 1961 fand an der MGU eine *interfakultative Konferenz* über 'Der dialektische Materialismus und der moderne Positivismus' mit über 500 Teilnehmern und ca. 70 Referaten statt. Minister Stoletov rief dazu auf, während der Zeit der Koexistenz den Marxismus-Leninismus mit besonderer Entschiedenheit zu verbreiten, Hauptgegner sei dabei der Neopositivismus. Durch die russische Übersetzung von Bohr, Einstein, Bertrand Russell u.a. dringen positivistische Ideen auch unter sowjetische Dozenten und Studenten ein. Mitins Kritik bewegte sich im üblichen Rahmen[12], er hob jedoch hervor, dass man nicht rundweg den Wert aller vom Positivismus gestellten erkenntnistheoretischen Probleme leugnen

könne, so die Bedeutung der symbolischen Logik für die Erkenntnistheorie, das Verhältnis der natürlichen Sprachen zu künstlichen symbolischen Konstruktionen usw. Der bedeutendste sowjetische Relativitätstheoretiker V. A. Fok (Leningrad) [13], vermerkte, dass die Begriffe 'Relativität' und 'Äquivalenz zwischen Beschleunigung und Schwerkraft' zwar beim Aufbau der Theorie eine grosse historische Rolle spielten, jedoch nicht ihr eigentliches Wesen darstellen. Die mit ihrer Hilfe vorgenommenen positivistischen Spekulationen können jedoch nicht den physikalischen Wert der Theorie der Relativität (worunter Fok die spezielle Relativitätstheorie versteht) und der Gravitationstheorie (allgemeine Relativitätstheorie) schmälern. L. I. Ščekina polemisierte gegen die positivistische Deutung der Unbestimmtheitsrelation; auch V. D. Solov'jëv wandte sich gegen den Positivismus in der Quantenmechanik. Ja. F. Askinadze behandelte die Raum- und Zeit-Konzeption Reichenbachs. [14] G. P. Ščedrovickij sieht die Ursache der Misserfolge des Neopositivismus in der Wahl der mathematischen Logik als Apparat einer angeblich exakten Analyse der Wissenschaft. Man kann sie überhaupt nicht für die Struktur der wissenschaftlichen Erkenntnis verwenden, da sie keine Theorie des Wissens, keine Erkenntnistheorie, darstellt. Man muss also eine neue Logik mit einem anderen Apparat aufbauen. Die Erkenntnis bewegt sich in zwei Ebenen; sie enthält sowohl das Bezeichnete, d.h. den Inhalt, als auch das Bezeichnende, d.h. die Zeichenform, und schliesslich das Band der Bedeutung, das Inhalt und Form vereint. Dementsprechend bewegt sich auch der Denkvorgang in den beiden Ebenen Form und Inhalt. Die Formeln der Logik sollen daher die Struktur der zwei Ebenen abbilden und alle darin eingehenden Elemente und Komponenten fixieren. E. K. Vojšvillo widersprach dieser These, seiner Meinung nach ist die Verwendung der mathematischen Logik nicht die Ursache der positivistischen Fehlschläge. T. N. Gornštejn hob die steigende Bedeutung des Problems der Möglichkeit in Physik und Biologie hervor. Unter den nichtsowjetischen Physikern herrscht die operationalistisch-pragmatische Deutung der Möglichkeit. Die Positivisten definieren die Wirklichkeit als Möglichkeit der Wahrnehmung, sie betrachten die Dinge als Gesamtheit von Inhalten und möglichen Aspekten der Erfahrung, wobei jene Aspekte verstanden werden, die unter bestimmten Operationen in der Erfahrung auftreten können. Die Wirklichkeit ist ihnen das in der unmittelbaren Erfahrung Gegebene, sie ist als 'verifizierte' Möglichkeit ein Sonderfall der Möglich-

keit. Damit befinden sich Mögliches und Wirkliches nur im Bewusstsein, die Aktion des Subjekts verwandelt mögliche Erfahrung in aktuelle. Angesichts dieser Haltung verlangt Gornštejn, die marxistische Lehre von Möglichkeit und Wirklichkeit auf der Grundlage des neuen naturwissenschaftlichen Materials schöpferisch weiterzuentwickeln. (VF 1961, 9, 125–132). [15]

Vom *21.-31. 3. 1961* fand an der MGU ein *Allrussisches Seminar der Hochschullehrer* des dialektischen und historischen Materialismus für Naturphilosophie mit 600 Teilnehmern statt. Minister Stoletov nannte zwei Programmpunkte: (1) Durchdenkung von Naturwissenschaft und Technik, (2) Kritik der bürgerlichen Naturphilosophie. Akademiemitglied L. A. Arcimovič, einer der grössten Physiker der UdSSR, sagte, dank der Quantenmechanik habe der Materialismus eine neue Gestalt angenommen; alle physikalischen Entdeckungen seien eine glänzende Bestätigung des Diamat; wichtigste Aufgabe sei die Erforschung der Bewegungsgesetze der Teilchen, sie lässt sich nur durch Team-Arbeit zwischen Philosophen und Physikern mit Hilfe der materialistischen Dialektik lösen. A. A. Markov nannte die übliche Definition der Kybernetik als Wissenschaft von der Gewinnung, Speicherung, Verteilung und Verwendung von Informationen zu unbestimmt. Die kausale Abhängigkeit wirkt nicht momentan, wir können daher die Zeit als in diskrete Takte unterteilt ansehen, dementsprechend wird die Arbeit einer Rechenmaschine in Takte unterteilt. Man wäre versucht, die Kybernetik als Wissenschaft von den Kausalnetzen zu definieren, was jedoch ihren Gegenstand zu eng fasst. Sie ist vielmehr die allgemeine Theorie von Kausalnetzen. V. I. Sviderskij nannte Raum und Zeit 'brennende Probleme' im Hinblick auf den Erfolg des Diamat und die Bezwingung des Raums. Als Absolutheit von Raum und Zeit muss man ihre Universalität und ihren obligatorischen Charakter ansehen, unter 'Relativität' ist ihre Unterordnung unter die Materie als deren Seinsformen zu verstehen. Raum und Zeit sind in der Mikrowelt andere als in der Makrowelt. Der Raum ist 'die allgemeine Gesetzmässigkeit der Koexistenz der Veränderung von Gegenständen und Erscheinungen'. Möglicherweise haben wir es mit mehr als drei Dimensionen des Raums zu tun. (FN 1961, 4, 200–202).

4. VORTRÄGE. Am 14.2.1961 sprach Fok am IF über die 'Rolle der Relativitätsprinzipien und der Äquivalenz in der Ableitung der Theorie

Einsteins'. Wie Fok ausführte, nahm Einstein bei Ableitung seiner Theorie an, die Metrik der Raumzeit folge aus den Prinzipien der Relativität von Inertialbewegungen und des Grenzcharakters von c. Dies ist aber nur dann der Fall, wenn man bereits implizit annimmt, dass die Metrik von den physikalischen Vorgängen in Raum und Zeit unabhängig ist. Es lässt sich nämlich mit Hilfe der Fokschen 'Harmonischen Koordinaten' zeigen, dass ohne diese Annahme die Metrik wechseln kann und somit ein inhomogener Raum vorliegt. Die spezielle Relativitätstheorie bedarf zu ihrer Ableitung noch eines dritten Prinzips, nämlich der Unabhängigkeit der Metrik von den physikalischen Vorgängen in Raum und Zeit; die Idee der Relativität allein genügt jedenfalls nicht. – Auch die Einsteinschen Prinzipien der allgemeinen Relativitätstheorie kritisierte Fok: Ein allgemeines Relativitätsprinzip, verstanden als Verallgemeinerung des Galileischen Relativitätsprinzips auf willkürliche Beschleunigungen und formuliert als Kovarianz der Gleichungen gegenüber willkürlichen Koordinaten, ist überhaupt nicht möglich. Die physikalischen Vorgänge werden nämlich nicht nur durch das Aussehen der Differentialgleichungen, sondern auch durch Anfangs- und Grenzbedingungen bestimmt; letztere sind aber i.a. nicht kovariant und können es gar nicht sein. Möglich ist nur die Kovarianz von Gleichungen; diese wiederum ist aber kein physikalisches Prinzip, sondern stellt nur die Forderung nach Widerspruchsfreiheit einer Theorie dar: Die in K formulierten Naturgesetze dürfen nicht den in K′ formulierten widersprechen. Es wird somit nicht das Relativitätsprinzip, sondern der Charakter der Geometrie der Raumzeit beim Übergang zur allgemeinen Relativitätstheorie verallgemeinert. – Was nun das Äquivalenzprinzip betrifft, so hat es lokalen Charakter und bedeutet daher keine Äquivalenz von Beschleunigung und Schwerkraft. Richtiger wäre es, darunter die Äquivalenz von träger und schwerer Masse zu verstehen, liesse der Rahmen der Einsteinschen Theorie eine Definition von träger und schwerer Masse zu. Die allgemeine Relativitätstheorie hat nicht das Äquivalenzprinzip zum Grundinhalt, sondern ist vielmehr eine Theorie der Schwerkraft. Sie vereint ebenso wie die spezielle den raumzeitlichen Zusammenhang der Ereignisse mit dem von Ursache und Folge: Wie A. D. Aleksandrov zeigte [16], folgt die Metrik der Raumzeit aus einem bestimmten Kausalzusammenhang der Ereignisse. Ferner vereint die Theorie Metrik und Schwerkraft, da der metrische Tensor gleichzeitig den Gravitationstensor darstellt. (VF 1961, 7, 159–160).

Im Mai 1961 besuchte Niels Bohr die UdSSR. Er sprach am Lebedev-Institut der AN und der physikalischen Fakultät der MGU. Angesichts der grundlegenden Bedeutung seiner Ausführungen soll darüber im Rahmen einer Darstellung der Beziehungen Bohrs zur Sowjetphilosophie gesondert berichtet werden.

Stand 1. 12. 1961

ANMERKUNGEN

1. Siehe V. I. Lenin: *Sočinenija,* t. 33, 4. izd., Moskva 1955, S. 207: "Ohne eine solide philosophische Begründung kann keine Naturwissenschaft und kein Materialismus den Kampf gegen den Ansturm der bürgerlichen Ideen und die Wiederherstellung der bürgerlichen Weltanschauung bestehen. Um diesen Kampf zu bestehen und mit vollem Erfolg zu Ende zu führen, muss der Naturwissenschaftler ein moderner Materialist sein, ein bewusster Anhänger jenes Materialismus, der durch Marx vertreten wird, d.h. er muss dialektischer Materialist sein."
2. Hier wird unter 'Dialektik' offenbar Lenins 'wechselseitige Abhängigkeit und engster unlöslicher Zusammenhang aller Seiten jedes Phänomens' verstanden, wie sie auch die *Philosophische Enzyklopädie* definiert. S. V. I. Lenin: *Sočinenija,* t. 21, 4. izd., Moskva 1955, S. 38, übernommen in *Filosofskaja Énciklopedija* t. 1, Moskva, 1960 'Dialektika', S. 477. Man sieht an diesem Beispiel, wie ein an sich durchaus undialektischer Grundsatz der Naturwissenschaften, nämlich dass Gegenstandsbereich und Methode der einzelnen Disziplinen die formalen Grenzen immer mehr überschreiten, bedenkenlos von den Sowjetphilosophen zugunsten des Diamat gebucht wird. Es handelt sich dabei um eine Art naturwissenschaftlichen Integrationsprozesses mit Eindämmung der Autonomie der Einzeldisziplinen.
3. Man sieht an diesen suggestiven Identifikationen von 'Fortschritt = Materialismus = Vernunft' und 'Idealismus = Reaktion = Aberglaube', dass zum mindesten die offizielle Sowjetphilosophie noch weit von einer objektiven Beurteilung anderer Lehren und damit von einer echten wissenschaftlichen Koexistenz entfernt ist.
4. Ähnlich sprach sich Fedoseev bereits auf der Allunionskonferenz über philosophische Probleme der modernen Naturwissenschaft 1958 aus (S. *Filosofskie Problemy Sovremennogo Estestvoznanija,* Moskva 1959, S. 593).
5. Es ist kennzeichnend für die Lockerung in der sowjetischen Philosophie der Naturwissenschaften, dass dieses seit Jahren überaus heftig angegriffene Standardwerk des Positivismus 1960 in russischer Übersetzung erschien, übersetzt von N. V. Vorob'jëv, herausgegeben von G. A. Kursanov, einem Philosophen, und dem Physiker M. F. Širokov.
6. Obwohl Vorob'jëv selbst Franks Buch übersetzte, legt er ihm eine Ansicht in den Mund, die dieser gerade zurückweist. S. russische Ausgabe F. Frank: *Filosofija Nauki,* Moskva 1960, SS. 356–364. In seiner Auseinandersetzung mit der Tendenz, Analogien zwischen physikalischen Theorien und dem gesunden Menschenverstand zu finden, versucht Frank an dieser Stelle u.a., die Argumente Bavinks gegen den Materialismus zu widerlegen. Man sieht, dass die Sowjetphilosophen selbst

potentielle Bundesgenossen gegen die Metaphysik abweisen, wenn es sich um Positivisten handelt – eine Haltung, die ja schon Lenin gegen den atheistischen Energetismus Ostwalds vertreten hatte.

7. Dieses wird allerdings im Bericht nicht genannt.
8. Ob eine Lösung wie 'Kein Quantendeterminismus, aber Quantenkausalität' durchführbar ist, scheint fraglich. Nach Fok kennzeichnet ψ nur die Möglichkeiten des einen oder anderen Resultats der Wechselwirkung des Einzelobjekts mit dem Gerät, so dass der klassische Determinismus nicht einmal eine hinreichende Formulierung der Quantengesetze erlaubt. Zwar ist durch die Schrödinger-Gleichung ψ eindeutig aus dem Anfangswert bestimmbar, aber eben nur als Änderung der Wahrscheinlichkeiten; damit bezieht sich die von Fok behauptete Kausalität in der Quantenmechanik nicht auf realisierte Ereignisse, sondern auf Wahrscheinlichkeiten (S. V. A. Fok in *Filosofskie Problemy Sovremennogo Estestvoznanija,* Moskva 1959, S. 220–229). Dass durch Foks Konzeption die Reichenbachschen Kausalanomalien entfallen, hat die Sowjetphilosophie erst noch zu beweisen. (S. H. Reichenbach: *Philosophische Grundlagen der Quantenmechanik,* Basel 1949, SS. 38, 40, 56).
9. Aus diesen Andeutungen ist leider nicht zu ersehen, wie sich Solgalov die Erfüllung seines Programms denkt. Das physikalische Problem besteht in folgendem: Reale Teilchen emittieren in einem sog. virtuellen Prozess andere Teilchens, die wieder reabsorbiert werden, ohne dass dadurch eine Änderung des Teilchenzustandes eintritt. In 2. Näherung liefern diese Prozesse einen Beitrag zur Energie des realen Teilchens, den man als Selbstenergie bezeichnet. Dies geschieht z.B. durch die Wechselwirkung eines ruhenden Protons mit einem von Photonen freien elektromagnetischen Feld, wobei die Energie des Coulombfelds durch die Emission und Reabsorption der virtuellen Photonen erzeugt wird. Lässt man unendliche Ausbreitungsvektoren der emittierten Teilchen zu, so ergibt sich eine unendliche Selbstenergie. Der einfachste Weg, zu einer endlichen Selbstenergie zu gelangen, ist die Abschneidung des Ausbreitungsvektors. Wo in diesen von Solgalov angesprochenen Ausgangssachverhalten und den ihnen zugeordneten Symbolen dialektische Widersprüche liegen, ist auf Grund des Berichts nicht einzusehen. Es soll jedoch nicht von vornherein bestritten werden, dass eine dialektische Deutung möglich ist; so etwa könnte u.U. der Begriff 'Selbstenergie' als Einheit der einander ausschliessenden Kennzeichnungen 'Selbheit' als reales Teilchen und 'Nicht-Selbheit' als Emissions- u. Reabsorptionsprozess virtueller Teilchen gedeutet werden, wobei freilich erst einmal der Sinn von 'real' und 'virtuell' aus der Erkenntnisproblematik von 'beobachtbar' und 'nicht beobachtbar' herausgenommen werden und als 'Selbheit' und 'Nicht-Selbheit' definiert werden müsste – wovor sich der Physiker wohl hüten wird. Aber selbst dann wäre noch zu beweisen, dass aus einer so gedeuteten Sachlage die 'Selbstbewegung', d.h. die Emission u. Reabsorption, folgt und nicht umgekehrt gerade die widersprüchigen Bestimmungen 'Selbheit' und 'Nicht-Selbheit' eine Folge der 'Selbstbewegung' sind. (S. W. Weizel: *Lehrbuch der theoretischen Physik,* Bd. 2, Berlin-Göttingen-Heidelberg 1958, SS. 1248–1252).
10. Es ist kennzeichnend, dass Kopnin 'Weltanschauung' auf die Alternative von Idealismus und Realismus ('Grundfrage der Philosophie') und auf die Evolutionstheorie reduziert. Die Frage nach der Grundsubstanz, also nach dem Kernsatz der materialistischen Weltanschauung, wird hier gar nicht mehr gestellt. Mit diesem Minimalprogramm glaubt Kopnin offenbar, sich den Naturwissenschaftlern stellen zu können.

11. Žmudskij machte dieses Problem zum Gegenstand einer Monographie, S. A. Z. Žmudskij: *V. I. Lenin o vremennych krizisach v estestvoznanii,* Kiev 1960.
12. Verzicht auf Weltanschauung und allgemeine wissenschaftliche Methodologie, rein formale Analyse der Sprachphänomene, subjektiver Idealismus, Phänomenalismus, Leugnung der Kausalität und objektiven Gesetzmässigkeit.
13. S. V. A. Fok: *Teorija prostranstva, vremeni i tjagotanija,* Moskva 1955, deutsch als *Theorie von Raum, Zeit und Gravitation,* Berlin 1960, 501S.
14. S. auch Ja. F. Askinadze in VF 1961, 3, 50–62, wo er sich besonders mit Bergson auseinandersetzt.
15. Gornštejn deutet leider nicht an, wie er sich dies denkt. Möglicherweise hat er die These Foks von den realmöglichen Zuständen des einzelnen Quantenobjekts im Auge, s. V. A. Fok, "Ob interpretacii kvantovoj mechaniki", in *Filosofskie Problemy Sovremennogo Estestvoznanija,* Moskva 1959, SS. 212–236.
16. S. das Referat A. D. Aleksandrovs auf der Allunionskonferenz über philosophische Probleme der modernen Naturwissenschaft 1958 in *Filosofskie ProblemySovremennogo Estestvoznanija,* Moskva 1959, S.S 117–120.

Some interesting figures concerning the *number of chairs* and of degrees conferred in philosophy were published by B. I. Kirillov ("Povyšit' uroven' dissertacjonnyx issledovanij", *VF* 1960, 3, 156–159). We obtain from his statements the following figures:

Year	1955	1956	1957	1958	1959
Number of chairs for Diamat in the VUZ		95			136
Number of Ph.D.'s teaching	31			32	
Number of Ph.D. degrees conferred (academic year ending in)		10	6	7	6

From September 1957 up to the beginning of February 1960, there were 16 Ph.D. degrees and 274 degrees of *kandidat nauk* conferred in philosophy.

We also learn something about the distribution of subject matter: there were 2.5 as many dissertations on Histomat as there were on Diamat; in the philosophy of science there were no doctoral dissertations, and only 20 (out of 274) dissertations were for the degree of Candidate of Sciences.

We find some complements to these figures in the lead-article of the VF 1960,10 ("Podgotovka filosofski kadrov – na uroven' sovremennyx zadač", pp. 19–26). The authors think that 200–220 new teachers of philosophy will be needed every year for the VUZ alone (p. 20) while high schools need them also. They then give figures concerning the teaching of philosophy in the VUZ directly under the Ministry of Higher and Middle Special Education. There are altogether 117 such VUZ, and the teachers of philosophy therein fall, as to their specialty, into the following categories:

Dialectical and Historical Materialism	440
History of Philosophy	78
Ethics and Esthetics	15
'Scientific Atheism'	9

In all of the Russian Federal Republic there are only 18 teachers specialized in the philosophy of natural science. (J.B.)

According to A. F. Okulov (as reported by A. P. Ermilov, VF 1961, 7, 146) there are (1961) about 2000 teachers of philosophy who have the degree of *kandidat nauk*. In the Uzbek SSR alone there are 100 such teachers. Institutes for Philosophy and Law have been established in the Academies of Sciences of the Uzbek and Kazax SSR. Groups for the study of philosophical and social problems were formed in Lithuania and Estonia. Still, the author complains that there is a serious lack of specialists in Dialectical Materialism, ethics, esthetics, foreign philosophy, and sociology; especially lacking are those having the title of Ph. D. The average age of a Ph.D. is 52 years. Okulov asks that younger scholars be admitted to the doctoral examination. (S.M.).

According to a report on the academic year 1958/1959 (VF 1960, 6, 157–160) there were in Rostov-on-Don 40 professors of philosophy of whom 29 had the degree of Candidate; 24 belonged to the three *kafedry* of philosophy (University, Institute of Education, and Higher Party School). Not content to teach only in their respective schools, these professors also delivered lectures for the public. The following is a list of subjects: On the XXI Party Congress – 40 lessons; The Historical Visit of N. S. Khrushchov to the U.S.A. – 32 lessons; on the problems of Communist morals – 18; esthetics – 13; scientific-atheistic subjects – 22; on the struggle against bourgeois philosophy and contemporary revisionism – 10 lessons. (J.B.)

Philosophical bibliography has lately been receiving increased attention. For example, for the first time, as far as is known, the VF published (1961, 5, 178–183) a list of titles of philosophical papers which appeared during 1960 in the *Scholarly Journals (Učenye Zapiski)* and *Scholarly Writings (Učenye Trudy)* of the SU; no less than 24 among the former and 27 among the latter are quoted, including such publications as *The Scholarly Journal of the Institute of Credit and Economy in Odessa.* The bibliography was made in a rather indolent way (no pages were indicated), but it is still an indication of progress. One may doubt, however, if the mass of such writings contains much valuable material when compared with that

published in the leading philosophical journals and bulletins. The titles quoted seem to indicate that the authors were mostly concerned with non-philosophical problems. (J.B.)

The *main topics studied* in Soviet Philosophy have been described as follows in the program for 1959–1961 of the *Filosofskie Nauki* (59, 3, 237–244):

1. Historical Materialism; problems of scientific Communism; problems of culture and Communist education
2. Ethics
3. Esthetics
4. Scientific atheism
5. Dialectical Materialism
6. Logic: a) problems of dialectical logic, b) problems of formal and mathematical logic
7. Philosophical problems of natural science
8. History of Marxist-Leninist philosophy and criticism of contemporary revisionism
9. History of foreign philosophy and criticism of contemporary bourgeois philosophy and sociology
10. History of philosophy of the nations of the SU
11. Philosophy of the nations of the East

The following plan has been approved (according to A. P. Ermilov, VF 1961, 7, 105b) by the IF:

1. The laws *(zakonomernosti)* of the development of Communist society
2. Communist education of the masses; problems of Marxist-Leninist ethics and esthetics, and of scientific atheism
3. Theory of materialist dialectics; problems of logic
4. Philosophical problems of natural sciences
5. History of the philosophy of Marxism and of its struggle against bourgeois philosophy; history of philosophy in the USSR
6. Criticism of contemporary bourgeois philosophy and of revisionism. (J.B.)

V. K. Tančer deplores the bad state of 'scientific atheism' (FN 1959, 2,

220–222). Not a single doctoral dissertation in that field was in preparation in 1958. It is true that there is a section for history of religion and atheism in the Institute of History of the AN and a *sector* for the same in the IF; there is also a museum of history of religion and atheism in Leningrad. But there seem to be no *aspirantury* for that discipline in the universities of Moscow, Leningrad and Kiev. On the whole, philosophers do not seem to be very much interested in these problems. Only one dissertation for the degree of *kandidat filosofskix nauk* was in preparation on Christianity and socialism in 1958. Several authors are, however, working on the history of atheism. (J.B.)

Similar complaints are voiced as to the study of *ethics* by A. F. Šiškin *(Voprosy marksistsko-leninskoj etiki.* 1960. p. 303). There are very few workers in the field; materials needed for such study are scarce; capital monographs on ethical problems do not exist, nor are there such textbooks for academic and middle-level schools. The preparation of workers is not being organized. (H.F.)

An amusing *letter by a group of students* was read by N. V. Stoletov (Minister of Higher and Middle-Level Technical Education) at the All-Union conference of academic teachers in Moscow July 4–7, 1961 (FN 1961, 4, 189). The students say that their teacher of philosophy teaches abominably *(čitaet lekcii otvratitel'no)* from notes out of which 'Penicillin might be obtained', and that he terrorizes them. "I shall give you the note 2 and you will know what philosophy is, namely philosophy of life without a scholarship" (sic!). The ministers condemned such methods. (S.M).

Sergej Leonovič Rubinštejn, the leading Soviet psychologist, died on January 11, 1960. Born June 19, 1889, he taught successively at the Universities of Odessa and Novorossijsk, and then became professor of psychology at various academic schools until he obtained (1942–1950) the chair of psychology in the MGU. Since 1950 he was the director of the Sector of Psychology in the IF. His main work (*Principles of General Psychology,* 1940), after having been accepted universally in the SU, was rejected in 1950 (during the 'Pavlovian *perestrojka*'). The author had to submit, and did so in 1958. (Necrology: VF 1960, 2, 178f.)

A. F. Okulov and *Ja. B. Razul'-Zatulovskij* visited Japan Sept. 6–Oct. 10, 1959. (VF 1960, 4, 178–181)
B. M. Kedrov, M. E. Omeljanovskij and *V. S. Semenov* assisted at the Stanford Congress of Logic and Methodology Aug. 24–Sept. 2, 1960. (VF 1961, 1, 150–161)
F. V. Konstantinov, the chief editor of *Kommunist,* received the Order of Lenin on Feb. 20, 1961. (VF 1961, 3, 182)
C. A. Stepanjan, member of the board of editors of the VF, received the order 'sign of honor' *(znak početa)* on Feb. 22, 1961.
Professor *Norbert Wiener* visited Moscow in 1960, and on July 7 he had a discussion with the members of the board of editors of the VF which was published in that journal (VF 1960, 9, 164–170). Later on, a paper of his on "Science and Society" was published in the VF (1961, 7, 117–122, transl. by M. K. Mamardašvili). The text is followed in the journal by a commentary ("Poslesovie k state N. Vinera 'Nauka i obščestvo", ib. 123–131). The paper of Professor Wiener has 6 pages of large print, the commentary 9 of small print, i.e. it is twice as long. The commentary is not signed and must consequently be considered as a statement by the editors. While written in a correct style – we are far from the insults once used in every discussion with non-Communists – it is still a strange product. The board of editors appears namely here as a teacher who corrects the errors of the writer. (J.B.)

New Compendia of Diamat

The publication of the text-book, *Osnovy marksistskoj filosofii* (Principles of Marxist Philosophy. M. 1958. 672 pp.), is in the opinion of leading Soviet philosophers not the end but rather the beginning of an endeavour to find a systematic form for the doctrines of Diamat. Since 1958 three further presentations of Diamat have already appeared: 1. That of *M. N. Rutkevič* (Sverdlovsk), *Dialektičeskij materializm* (Dialectical Materialism, M. 1959. ed. 2: 1960. 598 pp.), is a series of lectures intended for students of the science faculties. This work differs in many points from the structure and wordings of the *Osnovy* especially as regards the treatment of the third basic law of the dialectic, the 'negation of negation'.
2. Another work with the same title, *Dialektičeskij materializm* (M. 1960.

470 pp.) has been written by the teachers at the VPŠ under the direction of *A. .D Makarov, A. V. Vostrikov* and *E. N. Česnokov*. Its wordings do not differ significantly from those of the *Osnovy* but the material is somewhat differently distributed and, on the whole, is more clearly presented than is the case in the Diamat section of the *Osnovy*.
3. The lecture series of *I. D. Andreev, Dialektičeskij materializm* (M. 1960. 500 pp.), published by the IF, is in our opinion a step backwards rather than forwards in comparison to the other compendia.
In addition, there are highly abbreviated presentations of Dialectical *and* Historical Materialism both in the textbook, *Osnovy marksizma-leninizma* (Principles of Marxism-Leninism, M. 1959. 774 pp.), and in the 'popular textbook' by *V. G. Afanas'ev, Osnovy marksistskoj filosofii* (M. 1960. 350 pp.), which came out as the best work in a text-writing contest but, nevertheless, received only a third prize. A guide to Dialectical Materialism by *V. P. Kalackij (Dialektičeskij materializm* I. M. 1961. 167 pp.) is being published in serial form by the Moscow University Press.
Further compendia are in preparation. Thus, *P. V. Kopnin* (Kiev) let it be known (in FN 1961, 2, 112–119) that he and several colleagues were preparing a presentation of Diamat which is destined for students of philosophy and which will adhere as much as possible to the systematic logic of the doctrine itself. He presented the plan of the division of the work for discussion. – The philosophers of *Leningrad* are also working on a systematic textbook which will treat Dialectical and Historical Materialism in two volumes. If this work contains the ideas which have been developed in the publications of the leading Leningrad philosophers (A. D. Aleksandrov, V. P. Tugarinov, S. T. Meljuxin and others) in the last few years it should prove to be of special interest. (H.F.)

The New Philosophical Encyclopedia

With the publication in 1960 of the first volume ('A' to 'Diderot', 504 pp.) of the *Filosofskaja énciklopedija* (Philosophical Encyclopedia) philosophical lexicography in the SU has taken a 'great leap' forward in comparison with the previously definitive *Kratkij filosofskij slovar'* (Short Philosophical Dictionary – edited by M. Rozental' and P. Judin). A large editorial board, under the direction of F. V. Konstantinov, directs the work of an even larger editorial staff (the section 'A' to 'Belinskij' already gives a

count of over 120 names) and intends to publish the complete work in four volumes. To judge by the size of the first volume, it is more likely that there will be five volumes in all.

Most of the articles are of a factual nature and deal with persons, living and dead, who have a place in the history of philosophy and of thought, both Western and Soviet. There are longer articles dealing with the philosophic development of whole countries and, of course, there are details on philosophic concepts and names. Some of them are more complete and of quite some systematic interest: for example, that on Algebra of Logic, on Algorithms, on Being, and A. G. Spirkin's article on Dialectical Materialism.

From the article on Being *(bytie)*, for example, we may conclude that the tiresome conflict on the 'materialist' or 'realist' character of Lenin's definition of matter seems to be coming to a conclusion. Using a statement by Lenin it had always been maintained that the *sole* philosophically relevant attribute of matter was the fact that it was 'objective', i.e. independent of consciousness, reality. The question as to other, ontologically primary attributes of matter was rejected out of hand. Now we read in L. Denisova's presentation (as had already been said by other authors): "The simple recognition of the objectivity of being, of its independence from consciousness, does not necessarily imply the materialist position in philosophy. It is fully compatible with the objective idealism, with the religious philosophy of *neo-Thomism,* as, for example in the philosophy of Bocheński, Sciacca and others. 'A spiritualist and a realist are both able to be realists since realism only demands the recognition of a being independent of thought, it not being specified whether this being be material or spiritual *(duxovno)*' (Bocheński, J. M.: *Der sowjetrussische dialektische Materialismus.* Bern. 1950. S. 88; see also Sciacca, M. F.: "Das Wesen des Seins und die Dialektik seiner Formen". In: *Z. philos. Forschung*, 1959, Bd. 13, H. 4, S. 531)."

Here are two sample texts:

Abbagnano, Nicola, b. 15 July 1901 – Italian idealist philosopher, professor at the University of Turin. Advocate of the so-called positive existentialism. Tries to overcome the pessimism and, to a certain extent, the subjectivism of the main representatives of existentialism, and to bring it closer to science. A. holds the category of possibility, to which he opposes the category of necessity, to be the 'main tool of existential

analysis'. In distinction to Heidegger and Sartre, A. maintains that from various possibilities the individual can chose those which form 'the basis of an ordered and healthy existence'. S. Efirov, Moscow.

Wetter, Gustav (b. 4 May 1911) – Catholic historian of philosophy, member of the Jesuit Order. Since 1943 professor of history of Russian philosophy at the Papal Oriental Institute in Rome; Neo-Thomist, who basically distorts Soviet philosophy. Is in close contact with Austrian and West-German Thomists of Adenauer's Christian-Democratic Party. Wetter's main work is *Dialectical Materialism. Its history and its system in the Soviet Union* (1952, ed. 4: 1958). Wetter identifies Dialectical Materialism with mechanical and even with vulgar materialism *; he maintains that materialism is incompatible with the dialectic and opposes mature Marxism and also the Leninist stage in the development of Marxism to the young Marx. At several philosophic congresses and meetings Wetter has presented speeches which are inimically directed against Dialectical and Historical Materialism. I. Narskij, Moscow. (H.F.)

* Every reader of Wetter's book knows that the author stresses the *difference* between dialectical and 'mechanistic' materialism.

REVIEWS

V. P. Tugarinov: *O cennostjax žizni i kul'tury* (On Values of Life and Culture). Leningrad, Leningrad University Press, 1960. 156 pp.

The philosophical theory of values had been a typically under-developed domain of Diahistomat – and that not so much for essential reasons, because of some basic incompatibility of Marxism with the axiological approach to social phenomena, but rather for historical reasons. The *Short Philosophical Dictionary* did not contain even one article on value or axiology; the *Great Soviet Encyclopedia* considers axiology as an expression of bourgeois, idealistic ideology. A certain progress can be noticed in the new *Philosophical Encyclopedia* (I, 1960) where the article on 'Axiology' (by B. Byxovskij) – after some 125 lines describing and rejecting non-Marxist conceptions of value as idealistic doctrines – at least admits (in 7 lines) the necessity of investigating the 'categories of value' on the basis of Historical Materialism. The only contemporary Soviet contribution to this subject up to then had been A. F. Šiškin's paper for the XIIth International Congress of Philosophy (1958) "Concerning the Question of Moral Values".

The well-known Leningrad philosopher Vasilij Tugarinov, who has come out during the last few years with several remarkable writings in which he criticizes many cases of dogmatic 'hardening' and seeks to open new theoretical horizons for Marxist-Leninist philosophy, has published a new booklet *On Values of Life and Culture* as a first systematic, though sketchy, outline of a Marxist axiology. "Among Soviet philosophers", he says, "there has been in the course of the past few years a wide-spread opinion about the unscientific character of the axiological approach *(cennostnyj podxod)*. ...As a matter of fact, in the majority of writings of contemporary bourgeois philosophers and sociologists the theory of values is elaborated from an idealistic point of view. It would be, however, profoundly erroneous to consider for this reason the axiological approach to phenomena of itself as idealism. The Marxist axiological approach to phenomena by no means contradicts the scientific approach and represents only one of the sides and consequences of the latter." (p. 6)

The author treats the *General Questions of the Marxist Doctrine on Values* (Chapter I, pp. 15–29) rather shortly – being well aware that the

nature of values needs further investigation. He mainly concentrates, firstly, on the rough division of values into elementary values of life and values of culture – the latter being further divided into material, social-political and spiritual *(duxovnye)* values – secondly, on the distinction – relevant to all values – between (1) class elements and universally-human *(obščečelovečeskie)* elements; (2) objective and subjective elements; (3) absolute and relative validity. The general thesis is that almost all values represent some unity (very differently composed) of these opposite characteristics. To the excessive stress on the historical and social relativity of morality, etc., which always prevailed in Marxist literature, the author counterposes the important part played by the universally-human, objective and even absolute moments.

As for the content of the Marxist-Leninist 'table of values', Tugarinov treats it in the following framework: Chapter II – *Personal and Social Life* (pp. 30–62) 1. Personal life; 2. Work; 3. The sense of life; 4. Person and society; 5. Social life; 6. Peace. Chapter III – *Social-political values* (pp. 63–84) 1. Freedom; 2. Equality; 3. Fraternity; 4. Justice. Chapter IV– *Enlightenment* (pp. 85–102) 1. Enlightenment and religion; 2. Enlightenment and philosophy; 3. Enlightenment and culture. Chapter V – *Truth* (pp. 103–119) 1. Scientific truth; 2. Moral truth; 3. Esthetic truth. Chapter VI – *The Good* (pp. 120–136) 1. The concept of the Good; 2. The universally-human and the class-restricted Good; 4. Objective and subjective aspects of the Good and the Evil; Chapter VII – *Beauty* (pp. 137–152) 1. Concept and criteria of the beautiful; 2. Objective and subjective aspects of the beautiful; 3. The sensual and the rational in Beauty.

The most remarkable points in Tugarinov's book seem to be, *firstly,* that he explicitly and systematically introduces into the social philosophy of Historical Materialism a new dimension of thought – the axiological – and therewith makes a start in filling one of Marxism-Leninism's 'vacant fields' (A. Buchholz) which made this philosophy up to now (at least in part) thematically incongruent with traditional and contemporary Western philosophical thought. *Secondly,* that Tugarinov, though very cautiously, approaches the great problems of philosophical anthropology – the questions on the normative nature of man – without neglecting the historical and social variability of human life. Of course, he also connects the problem with the future perspectives of Communism: "In connection

with the question of the absolute and eternal side of morality, it is fitting to dwell upon our relationship towards moral anthropologism and anthropologism in general. Anthropologism means the derivation of judgements on social questions from eternal and unchanging properties of man, from his 'nature'. The classics of Marxism-Leninism criticized the anthropologism of Feuerbach, Černyševskij and others, and this critique remains valid also in our day. But one should not lose sight of the fact that the liberation of humanity from the fetters of capitalism and the building up of socialism and Communism are the basis for the formation of a united humanity, humanity 'in general' in a certain sense of this word, and the rebirth *(vozroždenie)* of the true properties of man which flow from his social nature." (pp. 130–131) *Thirdly*, axiological 'anthropologism' *sui generis* serves as the basis for the affirmation of the Rights of Man: "Progressive social thought has stated for many centuries, that man is a person *, that he ought to be treated as a person and that he ought to develop his personality. This means, that a) to every man certain human rights must be acknowledged, in particular the right to a certain degree of freedom; b) every man has his individual peculiarities and must have the right to manifest these peculiarities; c) the relations toward man must correspond to these properties, rights and the dignity of man; d) finally, man has definite duties towards society and must conduct himself as a worthy member of society, properly utilizing his rights, in particular his personal freedom." (p. 41) As the *fourth* remarkable point we wish to point out that Tugarinov is striving to surmount the narrow and often abstract understanding of human freedom which prevails in the philosophical literature of Communism – freedom is there defined as 'insight into necessity'. "In the most general sense", states Tugarinov, "freedom means the possibility to act according to one's own will and towards one's own objectives, and not under any external compulsion or restriction." (p. 65) Special attention is paid also to intellectual freedom, nothwitstanding the temporary limitations during the 'transitional period' which Leninism deems necessary. (pp. 70–71)

On the whole we must say that Tugarinov's book represents an interesting example of creative philosophical effort within Marxism-Leninism. It has become impossible to discuss the theory of Historical Materialism

* In Russian the one word '*ličnost*'' stands for 'person' and 'personality'.

without taking into account that which Tugarinov has contributed to the interpretation of this doctrine.

H. Fleischer

G. L. Kline: "The withering away of the state: philosophy and practice", in: *Survey,* No. 38 (Oct. 1961), pp. 63–71.

In a brief but excellent paper, Kline clarifies the theoretical presuppositions of the Communist concept of the 'withering away' *(otmiranie)* of the state, and analyses the setbacks in its implementation. Kline concludes that if the theory of withering away is interpreted as a prediction that certain institutions will liquidate themselves in accordance with Marx's historically deterministic processes, then the theory is disconfirmed by the non-withering of religion and the family in Soviet society. On the other hand, if the theory is interpreted voluntaristically, in line with Lenin's thesis in *Čto Delat'* that strong leaders make their own historical processes, (and Kline argues that the latter seems to have been Stalin's and Khrushchov's interpretation), then *no* fact of historical withering or non-withering could either confirm or disconfirm it. Interpreted in this way, to state that '*X* will wither away' is not to state a prediction, but an action-program meaning 'We will strive to liquidate *X*'.

As Kline points out, most Soviet references to *otmiranie* take on a more deliberately vague formulation: '*X* will wither away, after the (improbable) conditions *Y, Z* and others, are finally fulfilled'. As evidence he cites A. I. Vyšinski's 1937 book on legal theory and Karpetjan and Razin's recent article in VF 1961, 6. To these might be added Stalin's own long list of ambiguous preconditions and then basic conditions required before transition to Communism is possible (cf. Stalin: *Ekonomičeskie problemy socializma v SSSR.* M. 1952. pp. 163ff.), which virtually assure that the approach to *otmiranie* will be as lengthy and pragmatic as the Soviet leader chooses.

Kline's paper also includes a critique of Marxist base-superstructure interaction, and makes the excellent set of points that the doctrine that economics is somehow materialistic rests on a confusion of the distinct ethical and metaphysical senses of 'materialistic'. The ethical sense involves placing a premium on the acquisition of money, but says nothing

about the ontological status of matter. As Kline shows, there is nothing 'material' in a metaphysical sense about economic activities, since they are the product of human ingenuity; given the dichotomy between the Marxist-Leninist categories of 'matter' and 'non-matter' (consciousness), one would have to include the economic base as part of the latter.

D. D. Comey

CHRONOLOGY

Retrospective (1947 to 1959 inclusive)

1947	January	IF: discussion of G. F. Aleksandrov's *History of Philosophy*
	16–25 June	Congress on the same – speech of A. A. Ždanov.
	Sept.	First number of VF
1948	March	M. A. Markov's article on physical knowledge (VF 1947, 2, 140–176)
	23 March	The Minister of Higher Education, S. V. Kaftanov, condemns 'apolitical' and formalistic logic.
	July	Logic program of the Ministry of Higher Education
	31 July–7 Aug.	Conference on the situation of the biological sciences (Lysenko Affair)
		Xarkov: first conference on philosophical questions of physics
1949	11 March	Self-criticism of B. M. Kedrov (he ceases to be editor-in-chief of VF; four others are dropped from editorial staff)
	8–15 July	All-Soviet conference of occupants of chairs of Marxism-Leninism and philosophy. Address of S. V. Kaftanov
1950	9 May	Pravda: article by A. S. Čibakova on linguistics
	20 June	Pravda: Stalin's article on Marxism and linguistics (followed by articles of 4 July and 2 Aug.)
	28 June–4 July	'Pavlovian' conference
	1950/1951	Discussions in various institutes on formal and dialectical logic.
1952	Sept.	Stalin's *Economic Problems of Socialism in the SU*
		Translation of Aristotle's *Analytics*

	24 Dec.	Pravda: M. A. Suslov's attack on P. N. Fedoseev, president of IF
1953	18 Jan.	Self-criticism of IF
	5 March	Death of Stalin
	10 Aug.	IF joined to Section of Economy and Law of AN
1954	January	All-Soviet seminar for teachers of social sciences
	16 March	Malenkov names G. F. Aleksandrov as Minister of Culture
	April	Decision on the discussion in psychology
	23–28 Aug.	First foreign appearance of Soviet philosophers, in Zürich
1955	8 Feb.	Malenkov and Aleksandrov deposed (replaced by N. A. Mixailov)
	March	Decision in discussion on theory of relativity
1956	14–22 Feb.	20th Party Congress – 'Destalinisation'
	June	CK KPSS resolution on introduction in all higher schools of a course on Diahistomat
	Sept.	IF: establishment of a seminar of logic
1957, 1958		International (SU and satellites) seminar of philosophy in Prague (1957) and Sophia (1958) (VF 1959, 8, 163)
1958	April	IF: discussion on contradictions First number of FN
	12–18 Sept.	Soviet philosophers participate in Venice philosophical congress
	21–25 Oct.	All-Soviet conference on philosophical problems of science
	Sept.	Academy of Medecine SSSR: scientific meeting on

the ideological war with contemporary freudianism (VF 1959, 2, 164–170)

27 Oct.–3 Nov. Philosophical section of scientifico-technical committee of the Ministry of Higher Education of SSSR: conference on work in formal logic (VF 1959, 3, 175–179)

Publication of *Osnovy marksistskoj filosofii*

Nov. Section of Diahistomat of Moscow Pedagogical Institute: discussion of *Osnovy* (FN 1959, 1, 238–241)

18 Nov. Conference in honor of Robert Owen (VF 1959, 6, 172)

15 Dec. December Plenum

22–23 Dec. Institute of History of Art AN SSSR: Against contemporary revisionism in art and the study of art (VF 1959, 3, 170–175)

1959 27 Jan. Khrushchov's report to 21st Party Congress

20–23 Feb. Zonal conference of the philosophers of Siberia and the Far East (VF 1959, 9, 176–182. FN 1959, 2, 214–220)

18–20 March IF and Leningrad faculty of philosophy: scientific meeting on questions of Marxist-Leninist ethics (VF 1959, 7, 187–190. FN 1959, 4, 183–186)

24 April Scientific Information Sector of IF AN SSSR: conference "against new ideological means for the defence of capitalism" (VF 1959, 8, 158–161)

VF 1959, 5 is devoted to the 50th anniversary of *Materialism and Empiriocriticism*

VF 1959, 6, 178–185: Project of the program for the course of "Principles of Marxist Ethics" for VUZ.

7–8 May IF session in honor of *Materialism and Empiriocriticism* (VF 1959, 8, 142–146)

12–14 May IF: All-Soviet coordination conference on philosophy (VF 1959, 8, 149–158)

1 May MGU: session in honor of *Materialism and Empirio-*

14–15 May *criticism* (VF 1959, 8, 146–148. For others see: VF 1959, 9,166–176; FN 1959, 2, 24–65; FN 1959, 3, 234–236)

22 June Decree of CK KPSS (Pravda 23 June)

24 June June Plenum (Pravda 25–30 June)
FN 1959, 3: B. A. Čagin replaces M. T. Iovčuk as chief editor

21 Aug. Decree of Presidium AN SSSR "On Further Improvement of the Activity of Philosophic (Methodological) Seminars of Scientific Institutes of the AN SSSR" (VF 1960, 10, 129–133)
VF 1959, 8: A. F. Okulov replaces M. D. Kammari as chief editor
VF 1959, 9, 3–13: Program of the new editor

19–21 Nov. IF and Institute of Genetics: conference in honor of Darwin and Lamarck (VF 1960, 3, 150–156)

19–23 Nov. MGU: conference on dialectical logic at the faculty of philosophy (FN 1960, 2, 193–197)
Pravda 29 Dec.: Khrushchov's address to December Plenum

Current (1960)

6 Jan. Gor'kov automobile factory: conference of the readers of VF (VF 1960, 2, 105–107)
LGU: meeting on struggle against bourgeois philosophy, revisionism and dogmatism (VF 1960, 2, 150–156)

9 Jan. Decree of CK KPSS "On the Tasks of Party Propaganda in Current Circumstances" (Pravda 10 Jan.)

12 Jan. VF meeting on foreign philosophy and sociology (VF 1960, 7, 155–157)

19–23 Jan. Leningrad: inter-VUZ conference on "Contemporary Marxist philosophical thought in the fight against bourgeois philosophy, revisionism and dogmatism" (VF 1960, 6, 152–156. FN 1960, 2, 190–193)
Pravda 7 Feb.: Lead-article on higher quality scientists.

30 March VF meeting on the task of the section for esthetics (VF 1960, 7, 159–160)

5–6 April MGU: conference on automation in the faculty of philosophy (VF 1960, 8, 165–166. FN 1960, 4 150–154)

12–19 April IF, AON, MGU: meeting in honor of Lenin's 90th birthday.

27 April Sverdlovsk: Meeting of local philosophers on Historical Materialism (VF 1960, 9, 168–170)

4 May May Plenum (Pravda 5–6 May)
Meeting of the collegium of the Ministry of Higher and Medium Special formation RSFSR on the situation of Marxist-Leninist philosophy in the universities of the Russian Federation and measures for improvement of it. (FN 1960, 4, 155–158)

13 May Bureau of Scientific Soviet of the Presidium of AN SSSR for philosophical questions of natural science: conference on philosophical questions of science (VF 1960, 8, 162–165. Another meeting on the same topic 30 June: VF 1960, 10, 144–147)

21–25 May Tomsk: meeting on logic and methodology of science (VF 1960, 11, 153–158)

June IF: Lecture by J. J. Vigier (VF 1960, 11, 188f.)

1 June All-Union congress of teachers of social sciences (VF 1960, 10, 147f).

4 June Minsk: Meeting of readers of VF (VF 1960, 10, 148–151)
Pravda 22 June: Khrushchov's speech to Rumanian Party Congress

30 June s. 13th May

28–30 June MGU: conference on the speedy construction of Communist society and the all-round development of the individual (FN 1960, 4, 146–150)

5 July VF: discussion with N. Wiener (VF 1960, 9, 164–170)

13 July July Plenum (Pravda 14–17 July)
VF 1960, 6: M. B. Mitin replaces A. F. Okulov as chief editor. FN 1960, 3: M. T. Iovčuk replaces B. A. Čagin as chief editor

Dec. Moscow conference of representatives of Communist parties of world (Pravda 6–8 Dec.)

REPORT FROM THE INSTITUTE

The Institute offers (since 1961) three programs of Sovietological studies. *Program F* (one year) is destined for those who wish to be acquainted with Basic Sovietology. *Program H* (two to three years) is a course of higher studies in Soviet philosophy; an M.A. is required. *Program K* (four to five years) comprehends combined Sovietological and philosophical studies and leads to an M.A. or Ph.D. in philosophy (B.A. required).

Students who pass successfully the examinations may receive either the Certificate of Sovietology (Program F) or the Diploma of Sovietology.

The teaching staff consists of 15 professors. The following subjects are taught: Russian, History of Russia, History and Organisation of the Communist Party, Encyclopedia of Communism, Communist Ideology, Marxism, Leninism, Soviet Economy, Slavic Literature, Orthodox Church, Soviet Logic, Soviet Theory of Knowledge, Soviet Ontology, Soviet Philosophy of Nature, Historical Materialism, Soviet Theory of Religion and (Program K and partly Program H) general philosophy with its history.

A new *Program P* (for physicists, M.A. in Physics required) is in preparation; it is hoped that it will be started in fall 1962. This program will train Sovietologists specialized in Soviet physics and its philosophy.

Publications

The following have been published in the series of the Institute, 'Sovietica' by the D. Reidel Publishing Company, Dordrecht-Holland:

1. *Bibliographie der sowjetischen Philosophie, I: Die 'Voprosy filosofii' 1947–1956*. 1959. VIII + 72 pp.
2. *idem. II: Bücher 1947–1956. Bücher und Aufsätze 1957–1958. Namenverzeichnis 1947–1958*. 1959. IV + 109 pp.
3. J. M. Bocheski: *Die dogmatischen Grundlagen der sowjetischen Philosophie. Stand 1958*. 1959. XII + 84 pp.
4. N. Lobkowicz: *Das Widerspruchsprinzip in der neueren sowjetischen Philosophie*. 1960. VI + 90 pp.
5. S. Müller-Markus: *Einstein und die Sowjetphilosophie. Bd. I. Die Grundlagen. Die spezielle Relativitätstheorie*. 1960. XVI + 481 pp.
6. T. J. Blakeley: *Soviet Scholasticism*. 1961. 180 pp.

7. J. M. Bochenski, T. J. Blakeley (ed.): *Studies in Soviet Thought I.* 1961. 150 pp.
8. N. Lobkowicz: *Marxismus-Leninismus in der CSR.* 1962. 284 pp.

The following are forthcoming:

9. *Bibliographie der sowjetischen Philosophie.* III: 1959–1960.
10. Z. Jordan: *Philosophy and Ideology.* The development of philosophy and Marxism-Leninism in Poland since the Second World War. c. 600 pp.
11. L. Vrtačič: *Einführung in den jugoslawischenMarxismus-Leninismus. Organisation. Bibliographie.* c. 150 pp.
12. H. Fleischer: *Kleines Handbuch der kommunistischen Ideologie.* c. 100 pp.
13. S. Müller-Markus: *Einstein und die Sowjetphilosophie. Bd. II. Allgemeine Relativitätstheorie.* c. 300 pp.

The following are in preparation:

14. J. M. Bochenski: *Soviet Logic.*
15. D. D. Comey: *Logic and Cybernetics in the Soviet Union. 1950–1960.*
16. J. P. Planty-Bonjour: *Etudes d'ontologie soviétique.*
17. H. Fleischer: *Die Ontologie des dialektischen Materialismus.*
18. S. Müller-Markus: *Quantenmechanik und Sowjetphilosophie.*
19. A. A. Zinov'ev: *Philosophical Problems of Many-Valued Logic.* Transl. by G. Küng and D. D. Comey.
20. I. Angelelli: *Two Soviet Studies on Frege.*
21. *Bibliographie der sowjetischen Philosophie. IV: Ergänzungen 1947–1960.*
22. *idem. V: 1961–1962.*

A NOTE TO WESTERN AUTHORS

We offer to act as an intermediary between Western philosophers, who would like their books to be read by their Soviet colleagues, and philosophers of the Soviet Union. At the moment the situation is such that, because of financial restrictions, some of the latter have very little access to the books they would like to read. As every philosopher who publishes a work desires that it be read by competent men interested in his research, we believe that we may render a service both to the authors and to Soviet philosophers concerned.

Books and off-prints should be sent to the following address: The Editor, Studies in Soviet Thought, 1 A, rue de l'Hôpital, Fribourg, Switzerland. Parcels should be marked on the outside with 'For Sov. Phil.'.

HINWEIS FÜR WESTLICHE AUTOREN

Wir sind gern bereit, Veröffentlichungen westlicher Philosophen an sowjetische Fachkollegen weiterzuleiten. Ihre Versorgung mit ausländischer Literatur ist augenblicklich noch recht mangelhaft und mehrere Sprecher haben sich kürzlich auf einer Konferenz darüber beklagt. Da es der natürliche Wunsch des Autors ist, dass seine Arbeiten in möglichst weiten Fachkreisen Beachtung finden, glauben wir mit unserem Vorschlag sowohl den Autoren als auch den sowjetischen Philosophen einen Dienst zu erweisen.

Bücher und Sonderdrucke – mit einem Vermerk 'für SU' versehen – werden dankbar in Empfang genommen und an Adressaten in der Sowjetunion versandt.

Redaktion 'Studies in Soviet Thought'
1 A, rue de l'Hôpital, Fribourg / Schweiz

STUDIES IN SOVIET THOUGHT

A QUARTERLY OF THE INSTITUTE OF EAST-EUROPEAN STUDIES

AT THE UNIVERSITY OF FRIBOURG / SWITZERLAND

VOLUME II No. 2 JUNE 1962

Sovietological conference in Berlin

T. Blakeley Is epistemology possible in Diamat?

L. Vrtačič Der jugoslawische philosophische Revisionismus im Lichte der sowjetischen Kritik

H. Fleischer The limits of "party-mindedness": a selection of texts

Notes and Comments

Reviews

Arnold Buchholz: Der Kampf um die bessere Welt (J. M. Bocheński)

David Joravsky: Soviet Marxism and Natural Science, 1917–1932 (D. D. Comey)

A. S. Esenin-Vol'pin: Vesennij List (D. D. Comey)

S. T. Meljuxin: O dialektike razvitija neorganičeskoj prirody (H. Fleischer)

Chronology

1960 (addenda)

1961

Bibliography

Recent Western works on Soviet philosophy (K. G. Ballestrem)

Report from the Institute

A note to Western authors

This content downloaded from 128.151.10.35 on Fri, 30 Sep 2016 16:34:08 UTC
All use subject to http://about.jstor.org/terms

ABBREVIATIONS

AN	Akademija nauk (of SSSR unless otherwise specified)
AON	Akademija obščestvennyx nauk pri CK KPSS
CK KPSS	Central'nyj komitet kommunističeskoj partii sovetskogo sojuza
FN	Naučnye doklady vysšej školy. Filosofskie nauki
IF	Institut filosofii AN
LGU	Leningradskij gosudarstvennyj universitet
MGU	Moskovskij gosudarstvennyj universitet
SSSR	Sojuz sovetskix socialističeskix respublik
VF	Voprosy filosofii
VPŠ	Vyssaja partijnaja škola
VUZ	Vysšoe učebnoe zavedenie (and its plural)

TRANSLITERATION SYSTEM

Russian Letter *Cap. Ital.*	Studies in Soviet Thought	U.S. Library of Congress	Russian Letter *Cap. Ital.*	Studies in Soviet Thought	U.S. Library of Congress
А *а*	a	a	Р *р*	r	r
Б *б*	b	b	С *с*	s	s
В *в*	v	v	Т *т*	t	t
Г *г*	g	g	У *у*	u	u
Д *д*	d	d	Ф *ф*	f	f
Е *е*	e	e	Х *х*	x	x
Ё *ё*	ë	ë	Ц *ц*	c	t͡s
Ж *ж*	ž	ž	Ч *ч*	č	c̆h
З *з*	z	z	Ш *ш*	š	s̆h
И *и*	i	i	Щ *щ*	šč	s̆hch
Й *й*	j	ĭ	Ъ *ъ*	″	″
К *к*	k	k	Ы *ы*	y	y
Л *л*	l	l	Ь *ь*	′	′
М *м*	m	m	Э *э*	é	é
Н *н*	n	n	Ю *ю*	ju	i͡u
О *о*	o	o	Я *я*	ja	i͡a
П *п*	p	p			

Note: Articles in German will use 'ch' in place of 'x'. Commonly used proper names retain the form which is ordinary in English or German – e.g. Trotsky, Khrushchov, etc.

This content downloaded from 128.151.10.35 on Fri, 30 Sep 2016 16:34:08 UTC
All use subject to http://about.jstor.org/terms

SOVIETOLOGICAL CONFERENCE IN BERLIN

A conference of Sovietologists took place on April second and third of this year at the *Osteuropa-Institut an der Freien Universität* in Berlin-Dahlem under the auspices of the Rockefeller Foundation.

As in the case of the previous conference in this series (at the *Ost-Kolleg* in Cologne, February 17 and 18, 1961), the object of the meeting was to give young scholars in Sovietology an opportunity to report on their current research in different domains such as sociology, history, literature, philosophy, etc. Although many of the participants found that ten speeches in two days constituted some sort of limit, all agreed that the conference was excellently organized and smoothly run by the members of the *Osteuropa-Institut* in whose new building the meetings took place.

Senior participants in the conference included: Prof. J. M. Bocheński of the Institute of East-European Studies of the University of Fribourg (Switzerland), Prof. Clemens Heller (Paris), Prof. Helmut Hirsch (Cologne), Prof. George L. Kline (Bryn Mawr, USA), Prof. Hans-Joachim Lieber (*Osteuropa-Institut*, Berlin), Prof. Werner Philipp (Berlin), Prof. Maxim Rubel (Paris), Prof. A. Rüter (Amsterdam), and Prof. Günther Stökl (Cologne). Junior participants who did not give formal reports included: René Ahlberg (Berlin), Helmut Fleischer (Fribourg), François Liencour (Paris), Bernard Rüegg (Fribourg). Also present at the sessions were: Paul Brady (Fribourg), Peter Ludz (Berlin) and Karl Ballestrem (Fribourg). After the official opening by Prof. Philipp, Prof. Rubel presided over the first morning session, Prof. Bocheński over that of the first afternoon, and Prof. Lieber over those of the second day.

Miss *Ricarda Mischke* (Hannover) opened the first session with a report entitled "Karl Marx' Critique of Society and His Notion of Communist Society". She has summed up her remarks as follows: "Lenin considered the 1917 revolution to be that foreseen by Karl Marx, and the Bolsheviks to be the artisans of the 'classless society'.

"'Marx' central conception of the effect of this political but, above all, 'social revolution' is the notion that it reaches back behind all historical, social-political systems and that it is to modify man himself; this newly modified man is to create historically absolutely new relationships of human communitarian existence.

"This notion is bound up with the critical analysis 1) of the factual dis-

Studies in Soviet Thought II, 2 (June 1962).

integration of society in the 19th century; 2) of the questionable character of the social significance attained by the economic classification of men ('subsumption' under capital and labor) as the result of the decomposition of specific social structures; 3) of the existential problems of the distribution of labor in industry. All of these problems of modern society were to be resolved by the 'social revolution'. The revolutionizing of man was to be the revolutionizing of the individual's 'tied-down-ness' *("Festgeratensein")* to one type of work. The revolution was to eliminate the rigidity of human relations and all domination which functions to maintain the rigidity. In this perspective, the 'classless society' appears as human, communitarian existence which is 'uncommunicated', which is 'direct', and as the unconditioned state *(zustandloser Zustand)* of human, communitarian life.

"Since the carrying through of the revolution is – as Marx himself saw – above all the 'seizure of political power' and its use, the practical aspect of the 'social revolution' consists in the fact that the successful revolutionary cannot eliminate the 'previous relationships' but must manipulate them in such a way that through 'transformations' in the relationships men might be transformed. The Marxian notion of changing man through changes of relationships is necessarily abandoned in practice where the man to be transformed is totally subject to the manipulation of political power, i.e. to the holder of this power. This is, to my mind, a direct result of the Marxian notion itself which no one who would follow Marx can modify."

The following theses present a résumé of the report of *Wolfgang Kessel* (Hamburg) on "The 'Realization' of Communist Society": "The revolutionaries took over political power in order to bring into being the Communist society prophesied by Marx. In the beginning all their efforts were directed toward the dissolution of the entirety of the old system. The reason for this is the fact that Marx defined 'Communism' only as the 'non-existence' of the whole historical-social world of man. Marx opposed the idea that one could establish Communism. 'Realize' *("Verwirklichen")* does not mean 'establish' *("herstellen")* but 'eliminate' *("aufheben")*. But the position chosen by a regime forces the revolutionaries to establish a certain order and to maintain it. Since the concept 'Communism' offers no help in this regard, the revolutionaries are left with the task of re-organizing that which they wished to overcome. Capitalism, i.e. the organization of human life according to the accumulation of capital

(industrialization), is the sole concrete and workable form mentioned in the theory of Marx. Lenin's efforts as of 1919 – using the idea 'Communism' – were in this direction. The resulting system completely contradicts the idea of 'Communism' but it is the result of political activity which consequently follows the ideas of Marx. It is the 'realization' of Marxian ideology."

Hans Werner Kettenbach (Cologne) spoke on "Relations Between Lenin's Theory of Imperialism and International Socialism around 1914". He sums up his thought as follows: "An investigation of Lenin's controversy with Kautsky shows that Lenin's concept of imperialism is rooted in the discussion on the practical activities of social democracy which at the outbreak of the war in 1914 was acute. The controversy dealt with the question as to whether or not progress toward socialist goals was still possible within the framework of the bourgeois, democratic state. Lenin's 1916 publication on imperialism – in opposition to Kautsky and the social-democratic majority – answered in the negative. This question also occupied the prominent position in the post-1916 continuation of the controversy between Lenin and Kautsky although the notion of imperialism no longer stood in the foreground. The violent opposition between Lenin and Kautsky can be interpreted in function of the sociological position (share of political power) of Russian social democracy, on the one hand, and of German social democracy on the other."

Heinz Brahm (Kiel) reported on "L. Trotsky's Views on the Russian Revolution and on World Revolution": "Trotsky's 1906 theory of permanent revolution came to the conclusion – astounding for an orthodox Marxist – that the proletariat could take power in underdeveloped Russia sooner than in a capitalist, developed land. Trotsky came to this conclusion when he saw from statistics that the bourgeoisie in Russia had not expanded as it had in Western Europe. Before 1917, Lenin did not count – as did Trotsky – on an early dictatorship of the proletariat, but on an extended coalition regime made up of the proletariat and the peasantry. Trotsky's personal victory in the October Revolution, erroneously viewed by him as the triumph of Marxism, misled him into considering the Russian experience as a model for the future revolutions in Europe. Marxism prevented him from seeing Europe's completely different situation because of which the real crises in 1923 and 1930–1933 did not lead to the expected proletarian revolution in Germany. In Europe, the

words 'land, peace, bread' did not produce their effect. Trotsky remained true to the principle of world revolution although, as of 1923, he more and more considered the possibility that the Soviet Union would for years remain isolated in the capitalist world. On the other hand, an unexpected ally of bolshevism arose in Asia. For a time he thought that the national democratic movement in India and China, for example, was stealing the march on the European proletarian movement. Trotsky put the United States in the last place in the series of proletarian revolutions.

"In Germany – where for Trotsky the first step was to be taken next in the world revolution – the power was not to be taken with the same means which the Bolsheviks had used in Russia. Instead of Soviet legality, one needed parliamentary legality *(Reichstagslegalität)*. It was Hitler who discovered this after the putsch of November 9, 1923. With unfailing instinct he profited from the decomposition of the Weimar Republic around 1930. Trotsky, in exile on Prinkipo island, recognized already in 1930 that the same art of ruling which he had established for Russia was being developed by Hitler in the German context."

The fifth report, that of *Dieter Heinzig* (Hamburg), dealt with "Lenin and Stalin on Federalism" and may be summarized as follows: "The object of our investigation is the attitude of Lenin and Stalin toward the federative principle up to July 1918, date of the first legal recognition of this principle by its inclusion in the Soviet constitution.

"Lenin – like Stalin – did not consider problems of federation abstractly but rather always in the context of the national question, in relation to the right of self-determination.

"Lenin's considerations of this question fall into three periods. Both in the first of these periods (1897–1912) where the concept of self-determination was left undefined or only negatively defined, and in the second (1912–1917), where a restrictive interpretation of this concept identified it with the right to secession, Lenin showed himself a determined opponent of federation as organizational principle of the *party;* as advocate of a large, centralized state he admitted federation as organizational principle *of the state* only as an exception.

"Although the Stalin of 1912/13 understood the right of self-determination, etc. as right to federation, he appears on the eve of the revolution just as basically opposed as Lenin to a federative state structure (already at the end of March 1917 he published "Against Federalism").

"In answer to the question why hardly more than a year later (in the third, post-revolutionary period) the Soviet State became by constitution a 'federation', it must be pointed out that Lenin – taken unawares and threatened by the intensity of the secessionary tendencies in the minority areas – used the federative principle as one means (military force was another means) of centripetally working against the tendency toward disintegration.

"In any case, up to this time neither Lenin nor Stalin had a clear concept of federalism."

The full text of "Jugoslav Revisionism in the Light of Soviet Criticism" by *Ludvik Vrtačič* (Fribourg) follows this report.

The second day of the conference was opened by a report by *David D. Comey* (Fribourg) entitled "Marxist-Leninist Ideology and Soviet Policy". This report will appear in article form in a subsequent number of *Studies in Soviet Thought.*

The full text of "Is Epistemology Possible in Diamat?" by *Thomas J. Blakeley* (Fribourg) is reproduced below.

As ninth report in the series the participants heard *Theodor Arnold* (Berlin) on "The Function of Satire in the Totalitarian System". Since Mr. Arnold's résumé has not yet been submitted, it will appear in a subsequent number of this journal.

The final scheduled address, by *Günther Wagenlehner* (Hamburg), dealt with "The Problem of the Integration Factor for Political Unity in Socialism and Communism". Dr. Wagenlehner sums up his thought as follows: "Marx and Engels conceived Communist society as the complete negation of the bourgeois, capitalist system of the 19th century. It is a society, therefore, without state and needs no integration factor for its political unity. The proletariat must, nevertheless – according to Marx and Engels – first of all seize the power in individual states and constitute itself as a nation. The only legitimization which there is for proletarian domination is its task, i.e. the elimination of the existing system. But this task – as the Bolshevik example clearly shows – proved to be unrealizable. The new domination was either simply an intermediate step toward a Communist society without classes and without domination, in which case it deprived itself of the possibility of influencing the further development, or it implemented the oppressive measures of the Communist Manifesto whereby it would become indispensable and, what is more,

total. Between the alternatives, Communist society and conservation of power, the Bolsheviks were forced step by step along the road to a totalitarian state which had to orient itself toward capitalist economy in order to be able to effectively trade. This means that the Marxian legitimization of the dictatorship of the proletariat vanishes. In its place as integration factor of the Soviet state are found national consciousness, love of the fatherland and the patriotism of the Soviet citizen. Thereby, too, the principle of the national state, which Marx and Engels had denied, is assimilated to Communist ideology in order to maintain Bolshevist power. In the final analysis this development shows only that the Communists have lost sight of their specific task, i.e. the elimination of all political domination and of the whole capitalist system. In its place is the intention of making the Soviet Union the most powerful industrial nation so that it can take the leading position in the world."

Each of the ten reports to the two-day meeting was alloted a half-hour and was followed by another half-hour of discussion. Although the discussions on each particular topic were of general interest, it soon became evident that there were quite serious differences of opinion among the participants on one general theme, namely the importance of Soviet philosophy in reference to Soviet ideology and Soviet policy. For this reason, Prof. Lieber moved that the major portion of the final discussion be devoted to this topic. *Helmut Fleischer* (Fribourg) began this final discussion with a short, impromptu report on Soviet philosophy, in which he showed that there is significant philosophical activity going on in the Soviet Union and that, therefore, the question as to its intrinsic value and extrinsic influence on ideology and policy can be answered only by serious investigations of it. The ensuing discussion, although it established no eternal truths, showed that discussion between Sovietologists in different domains can be instructive for both partners and can act as an antidote to over-specialization. And this, precisely, was the object of this year's conference in Berlin. (T. B.)

THOMAS J. BLAKELEY

IS EPISTEMOLOGY POSSIBLE IN DIAMAT? *

Thought in the Soviet Union is currently in a critical transitional stage. At its origin Marxism-Leninism was a revolutionary Weltanschauung with philosophical pretensions which were unable to resist close scrutiny. This mixture of ideological and philosophical elements has not up to now been clearly defined – a situation which has permitted Western critics of Marxism-Leninism to dismiss it as an unviable amalgam of pseudo-scientific propositions. At the present time we observe in Soviet thought a tendency to gradually delimit the purely philosophical from the ideological.

A decision as to the viability of any portion of Soviet theory can be reached in several ways. A comparison with another theory on the same subject has the disadvantage, of course, that the decision is only as valid as the theory used for comparison. A decision made on the basis of "criticism from within" runs the danger of not being able to escape the internal contradictions of the system within which it must enclose itself. Our discussion of Soviet gnoseology does not offer a definitive decision on the viability of this sector of Soviet thought. Rather we will offer a description of the contemporary situation of Marxist-Leninist gnoseology by distinguishing the philosophical from the ideological.

Gnoseology can be minimally defined as the study of the conditions and validity of knowledge.

We consider the following differences to be definitory in establishing a distinction between the philosophical and the ideological. First, in taking a basic attitude toward reality, philosophy postulates the knowability and explicability of all that is, while ideology categorically affirms both *(Totalitätsanspruch)*. Second, in regard to the intended goal philosophy seeks to know while ideology seeks to form an attitude. The third and most significant difference has to do with the method employed by each. Although no other area of human knowledge shows a richness of method comparable to that of philosophy, it seems all of these methods have in

* Paper read at Sovietological conference in Berlin (April 2 and 3, 1962).

common a certain mixture of analysis (definitions) and synthesis (system building); the proportions of analysis and synthesis vary from doctrine to doctrine but all philosophic doctrines are subject to the methodological imperative that the subsequent synthesis is to contain no element which has not been subjected to analysis. Ideology, too, contains a certain mixture of analysis and synthesis which varies from doctrine to doctrine. But the specificity of ideology is due to the fact that certain classes of non-analyzed statements can be added to the system. These additives determine the character of the ideology in question as economic, political, legal, ethical, artistic, agricultural, industrial, or other.

In order to see to what extent Marxist-Leninist gnoseology today remains under the sway of ideological considerations we will examine the basic assumptions of Soviet gnoseology from this point of view.

The following ten statements are the basic assumptions of contemporary Soviet gnoseology:

(1) *The fundamental question of all philosophy as to the relationship of being and thought is correctly solved by the dialectico-materialist affirmation on the primacy of being (matter) and the secondary or derived character of thought (spirit).*

(2) *Material reality is dialectical by nature,* where "dialectic" means conforming to the three laws of the dialectic (unity and conflict of opposites, transition of quantitative changes into qualitative changes, negation of negation).

(3) *All matter has the property of reflection,* where "reflection" means the ability of a thing to enter into a mutually dynamic relation with another thing.

(4) *Reality is basically intelligible.* There is nothing which cannot be known.

(5) *The brain is the organ of thought,* developed in a long evolution.

(6) *Sense knowledge depends on* (or is identical to) *the first signal system of nerves; thought, the second signal system, is the signal of the signal and essentially bound up with the word.*

(7) *Thought is a reflection of being; the subjective dialectic reflects the objective dialectic; the laws of being (the "basic laws of the dialectic") are the laws of thought.*

(8) *Truth is the correspondence of thought to reality;* truth is objective or subjective, absolute or relative; truth is a process.

(9) *Historically conditioned practice is the basis of knowledge and the criterion of truth.*
(10) *Logic, dialectic and gnoseology coincide; the logical corresponds to the historical.*

In their efforts to build up a coherent doctrine on thought from these assumptions which are, for the most part, taken directly from the classics, Soviet philosophers have been faced with problems of interpretation. These problems have crystallised around five central issues, which are: the psycho-physical problem, abstraction, truth, practice, *sovpadenie*. On each of these issues there are two major opinions which can be defined in terms of their ideological commitment. This is not to say that these are the only two opinions which a Soviet philosopher can have on these questions – there are, of course, as many points of view as there are "dialectical" interpretations. But, these two major views represent the two extremes between which the others are to be found. We call the first of these opinions the "classicist" version because its adherents tend to interpret the classics literally while the second can be called "modernist" because its efforts are more in the direction of a rationalization of Diamat's theory of knowledge.

The psycho-physical problem is not a typically gnoseological problem but Soviet philosophers have been forced to take it up in a gnoseological context because the formulation of the "basic question of all philosophy" as found in the classics completely confuses the gnoseological question on the relation of being and thought with the psychological question on the relation of matter and spirit. The anomaly is most clearly expressed in a pair of parallel equations which were very frequent in Soviet literature up to recently. These equations read as follows: "being = matter = objective" and "thought = spirit = subjective". It is immediately evident that if subjective is taken as meaning "created by the knowing subject" and if one affirms that spirit does not exist, there arises a problem as to the reality of thought and the question is posed: is thought a part of objective reality? The answer of the classicists to this problem has been to affirm and maintain a reduction of psychic phenomena to physical phenomena which implies a reduction of thought to a series of neural processes. The modernists have attempted to by-pass the difficulty by maintaining that the conceptual pair "objective and subjective" cannot legitimately be included in the above equations because there are objective and subjective

aspects to be found in all things and in all areas of reality. Thus, for example, recent attempts to explain reflection as a property of inorganic matter have taken the form of the affirmation of a certain "interiority" which even the inanimate thing has and which makes it possible to speak of a certain subjectivity in a thing which is not able to perform the act of cognition.

The question of abstraction is somewhat less complicated and has not been too often discussed in the recent literature. The problem arises when one compares the notion of abstraction current in contemporary Soviet thought with the result which this process is supposed to produce. Abstraction is generally defined in Soviet texts as the elimination from our notion of a thing of all that is non-essential. Already in this description one senses that there will follow difficulties in trying to determine how one arrives at that which is essential. And, as a matter of fact, Soviet philosophy has it from the classics that our cognitive acts do attain essential knowledge. The classicists hold to the definition of abstraction as the purely negative elimination of non-essential properties and aspects and thereby reduce abstraction from the basic mode of knowing to a purely secondary role of filter. The modernists have not yet found a satisfactorily complete solution. They reject the interpretation which makes abstraction a purely negative elimination and insist that we somehow come through abstraction to a knowledge of the "essence" which in turn is more than just the so-called "essential properties or aspects".

For a long time the question of truth – the central question of any gnoseology – has been completely muddled by Soviet philosophers. We will not take the time to go into all of the details but the main problem is that in much of contemporary Soviet literature one finds the word "truth" confused with the word "knowledge". Thus, we are told that truth is objective and subjective and that truth is both a correspondence and a process. It is evident that if truth is a corrspondence then when one talks about process he must mean the process of knowledge – and, as a matter of fact, recent Soviet speculations on truth seem to have come to this conclusion. The same is true of truth as subjective and objective. Most of the time they seem to mean by objective truth "objectively true knowledge" and by subjective truth "subjectively true knowledge". The classicists often try even today – in spite of the inroads which mathematical logic has made into Soviet thought – to maintain that truth is both objective, i.e. some sort of being, and a process, although it is to be noted

that no author has tried to define in the same article truth as both a correspondence and a process. The modernists are definitely under the influence of the rapid rise of serious logical studies in the Soviet Union. They firmly maintain that the question of truth is a question of true propositions, i.e. a question of correspondence. In accord with each of these stands the classicists maintain that logic is dialectical logic and formal logic is a special case of this general logic while the modernists are firm in their view that logic is formal; a few of the more hardy – like Bakradze – have explained away dialectical logic by calling it Marxist gnoseology.

From the very beginning of the contemporary elaboration of a Marxist-Leninist gnoseology Soviet philosophers have calmly proceeded on the assumption that the practice mentioned as base and criterion of knowledge was the "sensory, productive activity" referred to by Marx and taken up by Lenin. This lead to the incredible affirmations which were typical of the period from 1947 to 1956 where we found that the "successful construction of socialism in the USSR" could be used to "prove" the most abstract philosophical theses. The process of the refinement of "practice" as a gnoseological category is still under way and the basic question which remains to be solved is: is practice an integral part of the cognitive process? The classicists answer in the positive and argue that since practice is both the basis of knowledge and the criterion of truth it must be a part of the cognitive process; practice is the point of departure and the ultimate goal of knowledge. The modernists reply in the negative and point out that a criterion cannot be an integral part of that for which it is to serve as criterion. Therefore, the modernists make a fundamental distinction which they are trying to impose on Soviet philosophy: practice as the basis of knowledge is a pre-cognitive material activity which poses the problem-situation which knowledge is supposed to solve – practice as the criterion of truth is the final confrontation of the product of knowledge with the object or process known, and as such it is extrinsic to the cognitive process itself.

Although it can be said that the problem of the *sovpadenie* is peculiar to Soviet philosophy, it seems that only the formulation is typically Soviet; the basic problem – that of satisfactorily distinguishing ontology, logic and gnoseology – has to be faced by any thinker who wants to develop a complete philosophical explanation of reality. In its peculiarly Soviet formulation the problem has taken the form of a question of linguistic

interpretation: does the *sovpadenie* mean that the dialectic (ontology), logic and gnoseology are identical? or does it mean that they coincide? In other words, is Marxist-Leninist philosophy one science or is it made up of several distinct sciences? On this question the classicists are in a very strong dogmatic position when they affirm that the three sciences are identical – they have numerous explicit quotations from the classics at their disposal. On the other hand, they are in a very weak philosophical position since they have up to now not been able to find a satisfactory philosophical reason for not distinguishing three sciences which, in fact, are developed by different men in different ways. The modernists, on the contrary, affirming that the three coincide, are in a weak authoritative position since they must explain away many explicit pronouncements of the classics; but their position is strengthened by the fact that they have a mass of empirical evidence – drawn from Soviet philosophy (and science) itself! – at their disposal because it is a fact that Soviet logicians do discuss a series of question which are not touched by the ontologists. In general, the modernists do not put themselves in an anti-classical position by affirming a complete distinction between these three sciences; rather they say that the *sovpadenie* is meant to indicate that these sciences coincide in as far as they all make use of the same "basic laws of the dialectic". The following is a schema of the two positions:

	classical	modernist
psycho-physical	reduction of psychic phenomena, including cognition, to physical, i.e. to neural phenomena; elimination of psychology as distinct from physiology or neurology	maintenance of psychic phenomena as distinct from the physical with an explanation of the parallelism in terms of the objectivity and subjectivity of the same material process
abstraction	is the purely negative elimination of non-essential properties and aspects	is the elimination of the non-essential with concomitant comprehension (selection) of the essence (essential aspects)

	classical	modernist
truth	is existential, i.e. some sort of being, and is a process; formal logic is a special case of dialectical logic	is logical and being is ontological; logic is formal
practice	is the basis of knowledge and the criterion of truth	as base practice is material activity (i.e. ontological); as criterion, it is correspondence (i.e. logical)
sovpadenie	dialectic (ontology), logic and gnoseology are identical	the three sciences coincide, i.e. use the same laws, but are distinct

If we compare the classicist and modernist positions in terms of the distinction we made in the beginning between philosophy and ideology, we can make the following observations:

(1) By basing themselves almost exclusively on the explicit pronouncements of the classics the classicists – by a sort of refusal to think – maintain a monolithic facade and seem to be under the impression that their version of Marxism-Leninism is able to give a thorough explanation of reality. In other words, the *Totalitätsanspruch* which we mentioned as the first characteristic of ideology is guaranteed by a "systematic ambiguity" as in the question of being and thought where a lumping together of two or three distinct problems makes it unnecessary to seek a clear solution to any of them. The modernist solutions to the problems we have listed are more philosophical in the sense that they tend to weaken or forget about the *Totalitätsanspruch* and rather seek to explain each problem as it comes up. This is not to say that the modernists have rejoined the Western philosophical tradition – but they are making progress in that direction.

(2) It has long been the claim of the Party-hacks that Marxism-Leninism is a revolutionary philosophy because it generates a militant attitude

toward other philosophical schools. This is what we have listed as the second characteristic of an ideology – it expresses the narrow interests of a group and fosters an attitude in its adherents. The classicist interpretation of Marxism-Leninism lends itself to such an operation because its explanations are seemingly simple, seemingly clear and are well suited for the construction of easily manipulated slogans. Because of its more subtle distinctions, the modernist version tends to be less suitable for concrete use and, therefore, is less ideological.

(3) In reference to the third characteristic we mentioned for ideology – the fact of adding unanalyzed components – two comments can be made on the classicist position. First, the classicist is characterized by his almost complete refusal to analyse the basic tenets of his system. Throughout his philosophical writings we find propositions of the form "the problem of the relationship of x and y is solved in Marxist philosophy by the affirmation of the dialectical unity of x and y". Second, the classicist has the bad habit of filling in gaps in his philosophical explanation with unanalyzed elements, usually taken from the most diverse sources. For instance, he does not hesitate to combine a neo-Hegelian view on the *sovpadenie* with a paleo-neo-positivistic version of abstraction and a semi-neo-Thomist account of truth as something existential. An analysis shows that these are incompatible – at least in the form in which they are presented by the classicists. Further, the fact that most classicists make philosophy by affirming and reaffirming and by multiplying specious examples is at least indirect evidence that they themselves have not arrived at any degree of clarity such as is presumed for a consequent synthesis. Because they are not so much concerned with universal explanations and restrict themselves to the analysis of particular problems, the modernists do not generally fall into this type of methodological difficulty. On the contrary, they are constantly in danger of being condemned by the classicists as "anti-classical".

In conclusion, it can be pointed out that contemporary Soviet philosophy, as philosophy, can be said to make progress to the extent that the "de-ideologisation" carried out by the modernists is increasingly accepted. There is, as a matter of fact, a correlation between the elimination of ideology from Soviet philosophy and the phenomenon which we call "de-classification" of certain domains.* To the extent that Soviet philosophy renounces its claim to universality of explanation and begins to apply

philosophical analysis to particular questions – i.e. to the extent that it eliminates ideological characteristics – to this extent it removes certain domains – those where analysis is used instead of affirmation – from the dogmatic control of the classics and opens the possibility of a certain amount of philosophical freedom.

* See J. M. Bochenski's article in *Studies in Soviet Thought* II, 1, p. 9.

LUDVIK VRTAČIČ

DER JUGOSLAWISCHE PHILOSOPHISCHE REVISIONISMUS IM LICHTE DER SOWJETISCHEN KRITIK [1]

I. EINFÜHRUNG

A. Über den eigenen Weg Jugoslawiens zum Sozialismus wurde seit 1948 viel geredet. Seit einigen Jahren kann man aber erst wissen, worum es hier eigentlich geht. Die Jugoslawen selbst brauchten ein halbes Jahrzehnt, um sich auf ihren eigenen Weg besinnen zu können. Die wissenschaftliche Diskussion setzte in den Jahren 1953/54 ein und intensivierte sich auf allen Gebieten immer mehr. Nach einem Jahrzehnt (April 1958) definierten die Jugoslawen endlich ihren 'Weg' im Parteiprogramm, daß die sowjetischen Kritiker als 'wahren' ([14] S. 44) oder 'echten Kodex des zeitgenössischen Revisionismus' ([8] S. 58) bezeichnen, und in zahlreichen wissenschaftlichen Abhandlungen, unter denen die philosophischen und soziologischen Schriften einen wichtigen Teil ausmachen.

Aus diesen Gründen ist es verständlich, daß eine wissenschaftliche Auseinandersetzung mit dieser Form des Revisionismus seitens der Sowjetunion erst nach 1958 einsetzen konnte. Das traf auch ein. Vor 1958 findet man in den sowjetischen Fachzeitschriften keine bemerkenswerte Beiträge dazu.

B. Meine Aufgabe besteht nun darin, zu zeigen, wo wir es nach Ansicht der sowjetischen Kritik zufolge in der jugoslawischen Philosophie, d.h. im dialektischen und historischen Materialismus, mit einem echten Revisionismus zu tun haben. Es wird mir in der gebotenen Kürze nicht möglich sein, auf alle jugoslawischen revisionistischen Gedanken hinzuweisen, die uns die sowjetische Kritik in Fülle vorgetragen hat. Ich mußte auch der sowjetischen Widerlegung weniger Platz einräumen, als sie in der sowjetischen Literatur einnimmt. Die dogmatischen Widerlegungen können meiner Meinung nach immer ohne Schaden vernachlässigt werden. Mehr Beachtung schenkte ich der sowjetischen Kritik nur dort, wo eine persönliche Note des Kritikers zu erkennen ist.

II. CHARAKTERISTIK DER SOWJETISCHEN ANTIREVISIONISTISCHEN LITERATUR

Für ein besseres Verständnis zur sowjetischen Kritik wird es nützlich

Studies in Soviet Thought II, 2 (June 1962).

sein, wenn wir zuerst einige Worte über die Entstehung dieser Literatur und über die Art und Weise der Diskussion vorausschicken.

A. Die sowjetische Kritik am modernen Revisionismus entfaltet sich in voller Stärke vor allem nach der ungarischen Revolution und dem 'polnischen Oktober'. Zwei Ereignisse waren es, die eine Intensivierung des Kampfes gegen den Revisionismus nach sich zogen. Das erste war die Beratung der kommunistischen Parteien in Moskau im November 1957, wo die jugoslawische Delegation die Erklärung der zwölf regierenden kommunistischen Parteien nicht unterschreiben wollte. Das zweite Ereignis war der 21. Parteitag, auf dem der Kampf gegen den Revisionismus als eine der wichtigsten Aufgaben der KPdSU bekräftigt wurde. Auf die in diesen Versammlungen angenommenen Dokumente, – die genannte Deklaration der zwölf kommunistischen Parteien und die Beschlüsse des 21. Parteitages der KPdSU – nehmen die sowjetischen Kritiker bei den Auseinandersetzungen ständig Bezug. Kaum hatten die Jugoslawen ihr Programm formuliert, da war auch schon eine Fülle von sowjetischen Gegenerklärungen vorhanden.

B. Was nun den Grundcharakter der sowjetischen Kritik betrifft, so handelt es sich offenbar um eine ganz planmäßig geleitete *politische* Aktion. Im Mittelpunkt der Kampagne steht auch ganz eindeutig die aktuelle politisch-sozial-ökonomische Thematik und die Philosophie ist dabei ziemlich vernachlässigt; man befaßt sich mit ihr im wesentlichen nur dort, wo sich Verbindungslinien zu den politischen Positionen zeigen.

Das politisch motivierte Interesse an der Verunglimpfung des Revisionismus zeigt sich auch in der unwissenschaftlichen Methode der Kritik, so vor allem in der Art und Weise, wie Zitate aus der jugoslawischen Literatur gebracht werden: es handelt sich immer wieder um dieselben, aus dem Zusammenhang herausgerissenen und so bequem zu handhabenden Sätze. Was noch schlimmer ist, wir finden dabei auch amputierte und schlecht übersetzte Zitate, z.B. finden wir ein solches aus dem Parteiprogramm des BKJ von 1958 (serbische A. S. 21, deutsche A. S. 24) bei nicht weniger als drei verschiedenen sowjetischen Kritikern (Česnokov [3] S. 44; Nikolaev [12] S. 4 f.; Èlez und Osipova [2] 257 [2]).

C. Die sowjetischen Kritiker des philosophischen Revisionismus haben vor der Auswahl der Zitate schon eine andere getroffen. Ihre Kritik wendet sich mit Vorliebe gegen solche Schriften jugoslawischer Philosophen, die einen nicht ausgesprochenen fachlichen Charakter haben, so

z.B. gegen die vieldiskutierte Broschüre von Marković 'Marxismus, Dogmatismus und Skeptizismus'. Aus meiner zur Zeit in Druck befindlichen Bibliographie des jugoslawischen Marxismus-Leninismus ist aber ersichtlich, daß Marković zu den diskutierten Fragen (Dialektik und Erkenntnistheorie) auch andere Arbeiten verfaßt hat (s. folgende Positionen bei Marković: 6, 7, 10, 24, 27, 28), die in philosophischen Fachzeitschriften erschienen sind.

Schriften ganz unterschiedlichen Charakters, wie das Parteiprogramm des BKJ einerseits und ausgesprochen philosophische Abhandlungen andererseits, werden nicht auseinandergehalten. Der Leser ist geneigt, zu glauben, daß alles was im Parteiprogramm steht, als endgültig zu nehmen und von den Philosophen bzw. anderen Theoretikern schon bewiesen wäre. Das jugoslawische Parteiprogramm kennzeichnet sich selbst jedoch so: "Es ist kein Kodex (das Programm nämlich) von Dogmen und endgültigen Wahrheiten. Unsere künftige gesellschaftliche Praxis und der wissenschaftliche Gedanke werden einzelne konkrete Standpunkte, Ansichten und Formulierungen überholen, richtigstellen, ja vielleicht sogar negieren, aber gerade dadurch den revolutionären Geist und die schöpferische Konzeption des Programms des Bundes der Kommunisten Jugoslawiens affirmieren" [3].

Die zitierten Stellen aus den jugoslawischen Quellen sind so knapp und geschickt angeführt, daß man sie in den meisten Fällen mit Leninzitaten treffen kann. Damit wird versucht ein zweifaches zu beweisen: 1. daß die Jugoslawen keine Marxisten-Leninisten sein können und 2. das ihr Denken ein Erbgut des Revisionisten Bernstein und des Opportunisten Kautsky ist, d.h. kein schöpferisches Denken.

Und endlich bemüht man sich immer wieder, zu zeigen, daß die bürgerlichen Philosophen den jugoslawischen vorgearbeitet haben.

III. DIE GRUNDLAGEN DES JUGOSLAWISCHEN PHILOSOPHISCHEN REVISIONISMUS NACH DER SOWJETISCHEN KRITIK

A. *Der jugoslawische Revisionismus im Diamat*

Als Quelle aller revisionistischen Abweichungen im dialektischen und historischen Materialismus gilt *die Preisgabe der marxistisch-leninistischen*

These von den zwei Lagern in der Philosophie. Die sowjetischen Kritiker, Butenko und Michajlov, berufen sich auf zwei Texte [4] von Mihajlo Marković, dem führenden serbischen Philosophen, in denen von der Unhaltbarkeit dieser These die Rede ist.

Nun, warum glaubt Marković, seinen Kritikern nach, diese These nicht mehr halten zu können? Weil er erstens in jeder bürgerlichen Philosophie das Eindringen marxistischen Gedankenguts beobachtet. Zweitens, weil er davon überzeugt ist, daß es keine grundlegende These des Diamat gebe, die nicht auch von einem Philosophen der Bourgeoisie übernommen werden könnte (Michajlov [9] S. 43) und drittens, weil er in den letzten Varianten des Realismus, Positivismus, Operationalismus und der Semantik die 'Übergangsformen' erkennt, die weder materialistisch noch idealistisch sind ([9] S. 44).

Für die sowjetischen Kritiker sind das keine Argumente, die den Verzicht auf die These von den zwei Lagern rechtfertigen könnten. Kurz und eindeutig werden sie der Reihe nach zurückgewiesen. Michajlov gibt zwar zu, daß es tatsächlich Übergänge von der bürgerlichen zur marxistischen Philosophie gibt, aber nicht in dem Sinne, wie es Marković meint, sondern Übergänge von den nicht wissenschaftlichen weltanschaulichen Prinzipien zur marxistischen Ansicht *(točke zrenija)* ([9] S. 50). Butenko dagegen erinnert Marković an das Prinzip der Parteilichkeit und sagt, daß die These von den zwei Lagern heute noch viel tiefere Gründe hat; der Kampf in der Philosophie ist nichts anderes als der Ausdruck der Klassenkämpfe in der Gesellschaft. Der Klassenkampf zwischen dem Kapitalismus und dem Sozialismus spielt sich heute auf der internationalen Ebene ab ([2] S. 91). Den zweiten Einwand Marković's beantwortet Michajlov mit dem Hinweis, daß die bürgerlichen Philosophen selbst anerkennen, daß es mit dem dialektischen Materialismus unvereinbare 'Elemente' gibt, die das Wesen der idealistischen Strömungen ausmachen ([9] S. 44). Auf das dritte Argument eingehend, wirft Michajlov Marković vor, Dinge wie semantische Philosophie einerseits und Semantik als spezielle Logik andererseits nicht unterschieden zu haben. Die 'Übergangsformen' sind nicht in der Philosophie zu sehen, sondern in den Wissenschaften, wo die eine oder andere philosophische Konzeption (z.B. Neopositivismus, Operationalismus) ihre Anwendung findet. In diesem Falle kann man aber von den 'Übergangsformen' in der Philosophie nicht sprechen, sondern nur von bestimmten wissenschaftlichen Material,

das nicht mehr mit den Prinzipien der entsprechenden Philosophie zu vereinbaren ist ([9] S. 44).

Die Versöhnung der zwei Lager aber, so, wie sie Marković sieht, habe aber ihre Gründe nicht nur in der 'Idealisierung' der bürgerlichen Philosophie, so sagen die sowjetischen Kritiker, sondern vor allem in seinem Mangel an Verständnis des Marxismus selbst. Es soll sich um eine wahre Entstellung *(izvraščenie)* der Dialektik und der marxistisch-leninistischen Erkenntnistheorie handeln.

a. Wie Marković die Dialektik versteht, zeigen Butenko und Michajlov an Hand des folgenden Textes aus seiner Broschüre 'Marxismus, Dogmatismus und Skeptizismus': "Gewöhnlich wird in der marxistischen Literatur die Dialektik der 'Metaphysik' als Methode des Denkens gegenübergestellt, nach der alle Gegenstände als etwas Statisches, Unveränderliches, isoliert von anderen betrachtet werden. Dagegen hat heute die Unterscheidung zwischen Dialektik und Metaphysik, als zweier grundlegender philosophischer Methoden, wenig Sinn. In unserem Jahrhundert sind die evolutionistischen Ideen sowohl in die Wissenschaft als auch in das Denken einfacher Leute schon so weit eingedrungen, daß keiner mehr bestreitet, daß sich alles verändert: Sterne und Felsen, Tiere und Pflanzen, menschliche Gesellschaft, Moral und Kunst" ([2] S. 147; [9] S. 45). Marković sollte dabei an die Entwicklung der Metaphysik vom 16. bis zum 19. Jahrhundert gedacht haben. Butenko erinnert ihn, daß darüber schon Lenin ein klares Wort gesprochen habe, indem er schrieb: "Mit dem 'Entwicklungsprinzip' sind ...'alle einverstanden'. Ja, aber dieses oberflächliche, nicht durchdachte, zufällige, philisterhafte 'Einverständnis' ist ein Einverständnis *solcher Art,* daß dadurch die Wahrheit erstickt und fade gemacht wird" [5]. Für Butenko bleibt "die grundlegende metaphysische Tendenz, ihre plattevolutionistische Interpretation *(ploskoevoljucionistskaja traktovka)* der Entwicklung, ihre antidialektische Richtung *(napravlennost')* unverändert" ([2] S. 149). "Die Dialektik steht der Metaphysik so unversöhnlich feindlich gegenüber, wie die Interessen der Arbeiterklasse und der Bourgeoisie unvereinbar sind" und "der unausbleibliche Sieg der Dialektik kommt auch nicht von selbst" ([2] S. 149). Kleine Irrtümer bei der Deutung der Dialektik, sagen die sowjetischen Kritiker, können furchtbare Folgen haben. Es handelt sich um nichts anderes als um die Entwaffnung der Arbeiterklasse.

b. An der Diskussion über die marxistisch-leninistische Erkenntnis-

theorie beteiligen sich schon mehrere jugoslawische Revisionisten. Es geht, nach Butenko, um eine Gleichsetzung der marxistisch-leninistischen Erkenntnistheorie mit allen anderen. Nach den Revisionisten sei sie nur eine unter mehreren möglichen Hypothesen, die den übrigen vorzuziehen sei ([2] S. 100).

Um den Revisionismus Marković's auch in dieser Frage zu belegen, zitiert Butenko folgenden Text: "Wie sehr wir auch von der Existenz der materiellen Welt überzeugt sind, ist sie doch nicht zu beweisen, weil die Beweisführung eine Denkoperation ist. Die Existenz bleibt kraft der Natur einer Beweisführung unbewiesen, da sie sich außerhalb des Denkens befindet. ('Die Frage nach der Existenz der Außenwelt ist keine Frage der Theorie, sondern eine praktische Frage'). Demgemäß können die ontologischen Thesen *(položenija)* nicht 'exakt' sein wie die mathematischen" [6]. Eine Entstellung liegt vor, schreibt Butenko, weil sich Marković der Kritik am Materialismus anschließt, die sagt: 'Beweisführung ist eine Denkoperation' und vergißt, daß der Marxismus die Praxis als das beste Argument und den besten Beweis in den Prozess der Erkenntnis eingeführt hat ([2] S. 102). Marković geht noch einen Schritt weiter mit den bürgerlichen Kritikern des Marxismus, schreibt Butenko, indem er erklärt, "daß das Kriterium der Genauigkeit die innere Kohärenz des Denkens sei ...während in den ontologischen Betrachtungen *(položenijach)* ein Sprung vom Denken zum Sein erfolgt; hier kann man nicht mehr von Exaktheit und Bewiesenheit sprechen, sondern nur von einem höheren oder niedrigeren Grad der Bestätigung durch die Praxis". (ebenda). Damit würde die Praxis, folgert Butenko, aus den Wissenschaften entfernt und als Mittel der Beweisführung ausgeschlossen ([2] S. 102).

Ein anderer Fall ist der Jovan Hristić's. V. S. Molodcov gibt in seinem Artikel "Klassovye i gnoseologičeskie osnovy revizionizma" [10] einen interessanten Hinweis auf den subjektivistischen Relativismus dieses Philosophen. Hristić sei der Meinung, daß man eine "philosophische Idee nicht deswegen äussert, weil sie im wissenschaftlichen Sinne wahr sein müsste. Die Philosophie kann uns nie eine sichere Wahrheit geben, uns wirklich über das Wahre belehren. Eine beliebige philosophische Idee hat nicht deswegen einen Wert, weil sie wahr ist, sondern sie hat einen Wert, weil sie uns zum Denken verpflichtet. Das Ziel jeder Philosophie ist es, uns zum Denken zu bewegen" [7]. V. V. Kazarinov macht zu dieser Auffassung in seinem Artikel "Revizionistskaja zaščita idealizma"

folgende Bemerkung: "Alle philosophischen Konzeptionen sind in dieser Sicht gleich wertvoll. Ähnlich, wie nach der christlichen Lehre in der Sünde alle Menschen gleich sind, sind nach Jovan Hristić alle philosophischen Lehren gleich in ihrer Unfähigkeit, irgend etwas Wahres zu sagen" ([6] S. 132).

B. *Der jugoslawische Revisionismus im Histomat*

Die Streitpunkte aus dem dialektischen Materialismus kommen auch im historischen Materialismus wieder vor. Auch hier wird die These von zwei Lagern verworfen, die Dialektik in der Gesellschaft angeblich falsch verstanden und der Wahrheitsanspruch der kommunistischen Partei als Avantgarde der Arbeiterklasse in Frage gestellt (Česnokov [3] S. 46; Nedošivin [11] S. 67).

Zur Diskussion steht die Leninsche Staats- und Klassentheorie. Sie wird durch den Redaktor der Zeitschrift *Naša stvarnost,* einer der wichtigsten Zeitschriften Jugoslawiens, folgendermassen wiedergegeben. Ratković schrieb: "Ihr Räsonieren (d.h. der Marxisten-Leninisten – L. V.) geht ungefähr so vor sich: Der Staat ist ein Organ der herrschenden Klasse; wenn die herrschende Klasse die Bourgeoisie ist, so ist der Staat kapitalistisch und seine Politik an der Festigung des Kapitalismus interessiert; wenn die Arbeiterklasse herrschend wird, dann handelt es sich um einen sozialistischen Staat, aber dieser Staat ist ein Instrument des sozialistischen Aufbaus" [8].

Ratković hat nach Ėlez und Osipova dreierlei gegen diese marxistisch-leninistische Auffassung einzuwenden: 1. Er lehnt die Alternative kapitalistischer Staat oder sozialistischer Staat ab, weil er eine dritte Realität sieht, nämlich den Staat als ein über allen Klassen stehendes Organ. 2. Er wirft den Marxisten vor, daß sie nicht imstande seien, Verständnis für die Entwicklung des kapitalistischen Staates aufzubringen, und zählt einige Merkmale dieser Entwicklung auf: Verstaatlichung, Planung, Investions- und Kreditpolitik, Außenhandel usw. Damit schränkt der Staat das Feld des Privatkapitals ein. Diese Entwicklungslinie bedeutet die Annäherung der ganzen sozial-wirtschaftlichen Ordnung an den Sozialismus und 3. Er wirft den Marxisten vor, sie zögen nicht die Möglichkeit in Betracht, daß der sozialistische Staat zu einem der Arbeiterklasse und der ganzen Gesellschaft gegenüber selbständigen Organ werden kann ([2] S. 246 f.).

Welchen Schluß zieht Ratković auf Grund dieser 'Argumente', fragen sich die sowjetischen Kritiker. Sie fassen ihn folgendermaßen zusammen: "Dort, wo die bürgerliche Klasse herrscht, ist der Staat nicht unbedingt kapitalistisch und seine Politik braucht nicht die Festigung des Kapitalismus, sondern kann die Einführung des Sozialismus zum Ziel haben; aber dort, wo die Arbeiterklasse an der Macht ist, gilt der Staat nicht als Instrument des sozialistischen Aufbaus, sondern als ein Mittel zur Restauration des Kapitalismus, zur Unterdrückung der Arbeiterklasse und des ganzen Volkes" ([2] S. 247).

Ratković sei, nach den sowjetischen Kritikern, unfähig zu sehen, welche Klasse im kapitalistischen Staat die wirklich herrschende sei. Nach ihm sei das Problem sehr komplex. Der Übergang vom absterbenden Kapitalismus zum aufkommenden Sozialismus (vgl. 'Übergangsformen' bei Marković), sei für Ratković voll von Widersprüchen, so daß es schwer sei, eine Grenze zwischen dem Kapitalismus und Sozialismus zu ziehen; die geographische Grenze sei für ihn sowieso eine Fiktion ([2] S. 248).

Die Antwort der sowjetischen Kritiker ist sehr einfach. Durch ihre Klassentheorie – antagonistische Klassen im Kapitalismus, keine Ausbeutung des Menschen durch den Menschen im Sozialismus – wird auch der grundlegende Unterschied zwischen dem Kapitalismus und Sozialismus als Weltsysteme deutlich gemacht. Eingehender braucht man sich mit dieser dogmatischen Antwort nicht zu befassen. Sie trifft sehr schlecht die von den Revisionisten aufgeworfene Problematik.

Die Revisionisten verbleiben aber nicht bei der Beschreibung und oberflächlichen Kritik der jeweiligen Zustände in einem oder anderem System. Sie wollen, wie die sowjetischen Kritiker immer wieder sagen, einen wesentlichen Beitrag zur marxistisch-leninistischen Lehre beisteuern. Ratković hatte ja geschrieben, daß "die Klassenvorstellungen, die vor mehr als 50 Jahren formuliert wurden, im wesentlichen präzisiert und ergänzt werden müssen" [9].

Um welche Präzisierungen und Ergänzungen geht es den jugoslawischen Revisionisten? Ich greife nur einige, die mir als besonders wichtig erscheinen, aus der sowjetischen Kritik heraus.

In der jugoslawischen Betrachtung der geschichtlichen Entwicklung hat die sozialistische Revolution keinen Platz mehr, weil der Staat kein Klassengebilde mehr ist, wo eine Klasse durch die andere unterdrückt wird. Nach der jugoslawischen Auffassung haben wir es mit einem Staat

zu tun, der über allen Klassen steht *(nadklassovoe gosudarstvo)* und als Organisator der Wirtschaft und des gesellschaftlichen Lebens überhaupt fungiert. Das grundlegende Klassenverhältnis in diesem Staat soll nicht mehr zwischen der Bourgeoisie und dem Proletariat, sondern zwischen der Bürokratie des Staatsapparates und dem Proleteriat bestehen. Diese Klassenstruktur soll sowohl im Staatskapitalismus (d.h. bürgerliche Demokratien) als auch im Staatssozialismus (d.h. Volksdemokratien) verwirklicht sein. Nach jugoslawischer Auffassung gibt es keinen wesentlichen Unterschied zwischen dem sozialistischen Sowjetstaat und einem imperialistischen Staat des Westens (um die sowjetische Ausdruckweise zu gebrauchen). Die geschichtliche Entwicklung verläuft also seit dem 19. Jahrhundert folgendermaßen: privatmonopolistischer Kapitalismus – Staatskapitalismus – Staatssozialismus – Selbstverwaltungssozialismus. Demnach wäre die höchste Form des Sozialismus erst in Jugoslawien verwirklicht. Alle diese Stufen folgen in der Evolution spontan *(stichijno)* aufeinander.

Wie das nun zu verstehen sei, geht aus einigen anderen Ausführungen hervor, die von den sowjetischen Kritikern in der jugoslawischen philosophischen und soziologischen Literatur entdeckt und kritisiert wurden.

Nach Lukić, einem der führenden Soziologen Jugoslawiens, geht es heute "vor allem um die Ausgleichung der Klassengegensätze. Wenn man die rein theoretische Diskussion über die absolute oder relative Verelendung der Arbeiterklasse beiseite läßt, gibt es keinen Zweifel, daß sich die Unterschiede zwischen den Kapitalisten und Arbeitern in einem wesentlichen Ausmaß im Kapitalismus selbst ausgleichen ... Seit dem sich die Situation der Arbeiter verbesserte, verschlechterte sich diejenige der Kapitalisten" [10].

Die sowjetischen Kritiker, Ėlez und Osipova, fragen sich nun, ob es sich hier um ein neues Gesetz der Verelendung der Kapitalisten handle, das an Stelle des Marxschen Gesetzes von der Verelendung der Arbeiterklasse zu treten habe? Als sie feststellten, daß Lukić das Gesetz von Karl Marx entstellt hatte (er habe nämlich den Arbeitslohn des 19. Jahrhunderts mit dem des 20. Jahrhunderts verglichen, anstatt den Bruch zwischen dem realen Arbeitslohn und dem Wert der Arbeitskraft deutlich zu machen) und damit widerlegt zu haben meine, zeigen sie ihm, wohin das konsequente Denken die Revisionisten führen muß: "Nehmen wir an, daß die Revisionisten Recht haben, wenn sie behaupten, daß beim staatsmono-

polistischen Kapitalismus infolge der grundlegenden Veränderungen des bürgerlichen Staates an Stelle des Gesetzes der absoluten und relativen Verelendung des Proleteriats tatsächlich das Gesetz der Bereicherung des Proletariats und der Verelendung der Bourgeoisie zu gelten begonnen hat. Nun, wenn die Bereicherung des Proletariats und die Verelendung der Kapitalisten zum Gesetz des Kapitalismus erhoben werden, das sich als Tendenz realisiert, dann folgt daraus der absurde Schluß, den die Revisionisten selbst zu ziehen sich scheuten, nämlich daß sich auf diese Weise das Proletariat in Bourgeoisie und die Bourgeoisie in Proletariat verwandelt; alles bewegt sich in ein und demselben circulus vitiosus der kapitalistischen Produktionsweise bei Beibehaltung des bürgerlichen Staates' ([2] S. 255 f.).

Warum haben also die Jugoslawen zwei grundlegend verschiedene Stufen des Imperialismus unterschieden (was übrigens gegen die Leninsche Theorie des Imperialismus ist), fragen sich wieder die sowjetischen Kritiker? Weil sie damit beweisen wollten, daß der privatmonopolistische Kapitalismus nicht als Vorabend der sozialistischen Revolution, sondern des Staatskapitalismus anzusehen ist ([2] S. 263).

"Die Revisionisten sind aber auch der Meinung", sagen die sowjetischen Kritiker, "daß der Übergang vom Staatskapitalismus, als höherem Stadium des Imperialismus, zum Staatssozialismus notwendigerweise und evolutiv zu erfolgen habe". "Warum unbedingt ohne Revolution", lautet die Frage der sowjetischen Kritiker. "Weil sich", hätten die Revisionisten geantwortet, "diese zwei Etappen qualitativ nicht unterscheiden; die Übergänge aber im Rahmen ein und derselben Qualität realisieren sich durch einen evolutiven Weg" ([2] S. 280). Wie wir sehen, ist die Antwort richtig. Es ist aber noch zu zeigen, wie die jugoslawischen Revisionisten beweisen, daß es sich in beiden Fällen um dieselbe Qualität handelt, und wie ihr Beweis durch die sowjetische Kritik als Verdrehung *(izvraščenie)* des Marxismus-Leninismus zurückgewiesen wird.

1. Wie schon erwähnt, sind die jugoslawischen Revisionisten der Meinung, daß es sich beim Staatskapitalismus und Staatssozialismus im Grunde genommen um ein und dasselbe Klassenverhältnis: nämlich Staatsbürokratie – Proletariat handelt ([[2] S. 268 f.).

2. Auf diesen zwei geschichtlichen Stufen (d.h. Staatskapitalismus und Staatssozialismus) wird der Staat vom Überbau in die Basis verlegt. Er ist hier ein bestimmender Teil in den Produktionsverhältnissen. Durch sein

Wirtschaftspotential und kraft der gesetzlichen Regelungen, die von ihm ausgehen, ist er imstande, die elementaren *(stichijnye)* Gesetze des Kapitalismus zu änderen und unabhängig von jeder Klasse im Dienste der gesamten Gesellschaft (d.h. als *nadklassovoe gosudarstvo)* zu wirken ([2] S. 264 f.; 274 f.).

3. Um die Ähnlichkeit dieser zwei Stufen beweisen zu können, müssen die jugoslawischen Revisionisten in folgender Weise vom sozialistischen Staat (nach ihnen 'Staatssozialismus') sprechen: "auch die sozialistische Revolution übergibt die Macht einer Ausbeuterklasse", nämlich der Staatsbürokratie ([2] S. 282); der sozialistische Staat "verschärft immer mehr die ungelösten Probleme" [11]; auch im sozialistischen Staat sind mehrere Klassen zu unterscheiden: eine, die höher bezahlt wird, als ihrem Arbeitswert entspricht, eine andere, die im Verhältnis zu ihrem Arbeitswert zu wenig erhält, und eine dritte, die gemäß ihrem Arbeitswert entlohnt wird ([2] S. 272).

Zum Klassenverhältnis Staatsbürokratie – Proletariat meinen die sowjetischen Kritiker, daß die Revisionisten diese Theorie, die sie uns als wissenschaftlich vorstellen möchten, deswegen aufstellten, um sie auch auf den sozialistischen Staat anwenden und diesen mit den imperialistischen Staaten identifizieren zu können. Auf die großen Veränderungen im 20. Jahrhundert hinweisend, hätten die Revisionisten gesagt, daß die Leninsche Klassentheorie der Realität nicht mehr entspräche ([2] S. 269). Das ist aber auf eine schlechte Auslegung der Leninschen Theorie zurückzuführen.

Zur Theorie des Staates, nach der er der bestimmende Teil in den Produktionsverhältnissen wäre, bemerken die sowjetischen Kritiker das Folgende: 1. Sie fragen sich, ob es nicht eine absurde idealistische Behauptung wäre, den Staat gleichzeitig als Überbau und Basis seiner selbst zu betrachten? Daß die revisionistische These jeder wissenschaftlichen Grundlage entbehrt, wird klar, wenn man folgende Frage stellt: "Ist der Staat Basis der Ideologie, des Rechts, der Moral usw.?" ([2] S. 267). 2. Was den kapitalistischen Staat angeht, so sind die revisionistischen Vorstellungen vom Staate, der über allen Klassen steht, reine Mythologie ([2] S. 269). Die Revisionisten sollten an die Personalunion der Staatsbürokratie und der Wirtschaftsmonopole denken ([2] S. 260 f.) und sich der Engelschen Worte erinnern, der zu dieser Frage folgendes geschrieben hat: "Je mehr Produktivkräfte er (der Staat) in sein Eigentum übernimmt, desto mehr

wird er wirklicher Gesamtkapitalist, desto mehr Staatsbürger beutet er aus".[12] Der sozialistische Staat ist nicht ein Bestandteil der Produktionsverhältnisse, der Wirtschaftsbasis, wie das die Revisionisten behaupten, die ihre verleumderische Behauptung, nämlich, daß die Staatsangestellten eine Ausbeuterklasse bilden, die die ganze Gesellschaft ausbeutet, dadurch zu beweisen suchen. "Er hat eine eigene sozialistische Basis, (nämlich) sozialistische Produktionsverhältnisse ... Die kommunistische Partei gewährleistet die wissenschaftliche Führung ebensowohl der Staatstätigkeit, wie auch aller Bereiche des gesellschaftlichen Lebens" ([2] S. 273 f.).
Der Annahme der oben genannten Klassen im sozialistischen Staat liegt die folgende Auffassung Kautskys zu Grunde: "Klasse kann man nur eine solche Gruppe nennen, die in Beziehung zu einer anderen Gruppe oder Klasse in der Eigenschaft der ausbeutenden oder in der Eigenschaft der ausgebeuteten auftritt" (meine Übersetzung) [13]. In dieser Definition wird das Verhältnis zu den Produktionsmitteln überhaupt nicht berücksichtigt. Das ist aber das Entscheidende in der *marxistischen* Definition der Klasse. Lukić geht noch weiter und verlagert die Problematik in die subjektive Sphäre des Individuums, weil er der Meinung ist, daß das Individuum gleichzeitig zwei Klassen, der ausbeutenden und der ausgebeuteten, angehören könne, oder gar keiner Klasse, wenn es nicht in den Produktionsverhältnissen steht ([2] S. 270).
Mit Hilfe dieser Theorie kann alles Mögliche 'bewiesen' werden, entgegnen die sowjetischen Kritiker. Sie ist pragmatischer Herkunft und möchte die prinzipiellen Unterschiede zwischen dem Kapitalismus und dem Sozialismus verwischen und dadurch den sozialistischen Staat diskriminieren. Marxistisch jedoch ist sie nicht, weil sie das Hauptattribut der Klassendefinition, nämlich die Frage nach dem Eigentum an den Produktionsmitteln, beiseite läßt ([2] S. 271).

C. *Warum erscheinen diese Irrtümer den sowjetischen Kritikern so wesentlich?*

Weil es keinen Zweifel darüber gibt, daß die sowjetischen Kritiker bei ihrer Diskussion mehr an die jugoslawische revisionistische *Politik* gedacht haben als an den philosophischen Revisionismus selber. Dieser wird dann und dort bekämpft, wo er im Dienste des jugoslawischen Staats steht. "Die Konzeption von Marković," schreibt Michajlov, "kann man als den ideologischen (philosophischen) Ausdruck der offiziellen jugo-

slawischen politischen Doktrin betrachten. Die theoretische Haltlosigkeit dieser Konzeption bestätigt die Lüge der politischen Begründung selbst" ([9] S. 51). Wenn wir diesen Zusammenhang annehmen müssen, dann sind die 'Handlangerdienste' der jugoslawischen Philosophen für den jugoslawischen Staat nicht gering. Sie hätten den 'neutralen' Weg Jugoslawiens mit folgenden Mitteln begründet: 1. Mit dem Objektivismus, der an Stelle der Parteilichkeit tritt. Die Konsequenz: in beiden politischen Blöcken werden gute und schlechte Seiten gesehen. 2. Mit der Theorie von Entwicklungsfähigkeit des kapitalistischen Staates, nach der die sozialistische Revolution abgelehnt und das Proletariat eingeladen wird, den bürgerlichen Staat weiter zu entwickeln helfen, anstatt ihn zu zerstören. 3. Mit der Theorie des Selbstverwaltungssozialismus ('Anarcho-Syndikalismus' – wie die sowjetischen Kritiker sagen), nach der das Absterben des sozialistischen Staates vorzeitig gefordert wird.

Daß diese drei Punkte die sowjetische Weltpolitik nicht unterstützen, ist eindeutig. Der sogenannten wissenschaftlichen Führung des Sowjetstaates durch die Kommunistische Partei der Sowjetunion steht eine andere gegenüber, die auch kommunistisch und wissenschaftlich zugleich sein will und ihren Einfluß auch außerhalb der staatlichen Grenzen geltend machen möchte.

IV. BEWERTUNG

Trotz allen genannten Schwächen der sowjetischen Kritik steht eines fest: Es gibt tatsächlich ganz wesentliche Unterschiede in der Philosophie selbst, unabhängig von ihren 'Anwendungen'. Die sowjetische Kritik könnte noch mehr jugoslawische philosophische Texte heranziehen, wenn ihr Interesse nicht zu sehr in der Politik läge. Es soll in Jugoslawien nach Ansicht der sowjetischen Kritiker eine ganz bunte Schar der Philosophen geben, die man als Positivisten, Existentialisten, Neokantianer usw. bezeichnen könnte (Butenko [2] S. 39). Die Kritik ihrer Lehren steht aber noch aus.

ANMERKUNGEN

1. Vortrag, gehalten an der Marxismus-Leninismus-Konferenz in Berlin (2.–3. April 1962).
2. Das Buch von Butenko, Osipova, Andreeva und Ėlez verdient aus vierfachem Grunde hervorgehoben zu werden: 1. es enthält die eingehendste Kritik des philosophischen Revisionismus, 2. der wichtigste Mitarbeiter Butenko kann als führender Kritiker des philosophischen Revisionismus betrachtet werden, 3. Ėlez und Osipova widmen das dritte Kapitel (68 Seiten) fast ausschließlich der Kritik des jugoslawischen Revisionismus im Histomat, 4. das Buch ist vom Philosophischen Institut der Akademie der Wissenschaften der UdSSR herausgegeben worden.
3. *Das Programm des Bundes der Kommunisten Jugoslawiens.* Deutsche Ausgabe. Beograd, Verlag Jugoslavija, 1958, S. 9 f.
4. "Die zeitgenössische bürgerliche Philosophie und der Marxismus". In: *Komunist.* Beograd, 15.11.1957. *Marxismus, Dogmatismus und Skeptizismus.* Beograd, Rad, 1958, 60 S.
5. Lenin, V. I.: Sočinenija, t. 38, str. 151; zit. nach Butenko [2] S. 148.
6. Marković, M.: Marxismus, Dogmatismus und Skeptizismus, S. 47; zit. nach Butenko [2] S. 101.
7. Hristić, J., In: *Politika,* 5.1.1958; zit. nach Molodcov [10] S. 24.
8. Ratković, R., In: *Naša stvarnost,* 1958, 2, 156; zit nach Ėlez und Osipova [2] S. 245 f.
9. *Naša stvarnost,* 1958, 2, 157; zit nach Ėlez und Osipova [2] S. 269; vgl. auch S. 246.
10. Lukić, R.: *Gesellschaftsveränderungen im 20. Jahrhundert.* 1957, S. 20; zit. nach Ėlez und Osipova [2] S. 253.
11. Bulaić, Ž.: *Probleme der politischen Oekonomie im Sozialismus.* Beograd 1958, S. 148; zit. nach Ėlez und Osipova [2] S. 275.
12. Marks-Engel's: *Izbrannye proizvedenija,* t. II., str. 139; zit. nach Ėlez und Osipova [2] S. 259.
13. Kautskij, K.: *Materialističeskoe ponimanie istorii.* M. 1931, t. II., str. 16; zit. nach Ėlez und Osipova [2] S. 270.

LITERATURVERZEICHNIS

[1] Butenko, A. P.: "Leninskaja teorija socialističeskoj revoljucii i sovremennyj revizionism". *VF* 1960, 4, 46–57.
[2] Butenko, A. P., Osipova, E. V., Andreeva, G. M., Ėlez, J.: *Protiv sovremennogo revizionizma v filosofii i sociologii.* (IF). M., AN, 1960, 405 str.
[3] Česnokov, D. I.: "O funkcijach sovetskogo socialističeskogo gosudarstva". *VF* 1958, 7, 30–47.
[4] Ders.: "Socialističeskoe gosudarstvo i sovremennyj revizionizm. Doklad". *FN* 1958, 4, 13–21.
[5] Egorov, A. G.: "Leninskaja teorija otraženija i sovremennyj revizionizm v ėstetike". *VF* 1959, 5, 67–82.
[6] Kazarinov, V. V.: "Revizionistskaja zaščita idealizma". In: *Vestnik moskovskogo universiteta,* 1959, 1, 125–138.
[7] Kotikova, D. D.: "Leninskaja kritika anarchizma i ee značenie dlja bor'by protiv sovremennogo revizionizma po voprosam gosudarstva. In: *Vestnik leningrad-*

skogo universiteta. Serija ėkonomiki, filosofii i prava, 1960, vyp. 4, 57–68.
[8] *Kritika sovremennych buržuaznych revizionistskich ėkonomičeskich teorij.* Pod red. prof. N. A. Cagolova. (MGU). M., Socėkgiz, 1960, 588 str.
[9] Michajlov, M. S.: "Po povodu psevdomarksistskich rassuždenij doktora Markoviča". *VF* 1959, 2, 42–51.
[10] Molodcov, V. S.: "Klassovye i gnoseologičeskie osnovy revizionizma". *VF* 1958, 12, 14–24.
[11] Nedošivin, G. A.: "Protiv čuždych idejnych vlijanij v ėstetike". *VF* 1959, 3, 63–75.
[12] Nikolaev, V. V.: "Protiv revizionistskich iskaženij marksistsko-leninskogo učenija o gosudarstve". *VF* 1958, 11, 3–17.
[13] Permjakov, S. M.: "Za socialističeskij realizm, protiv fal'sifikacii revizionistov". *VF* 1959, 4, 148–155.
[14] Petrosjan, M.: "Nekotorye voprosy ėtiki i revizionizma". *FN* 1958, 4, 33–44.
[15] Šestakov, M. G.: "Ob odnoj revizionistskoj koncepcii v sociologii. (O knige Radomira Lukiča 'Vvedenie v sociologiju. Belgrad, 1957 g.)" *FN* 1958, 4, 71–77.

HELMUT FLEISCHER

THE LIMITS OF "PARTY-MINDEDNESS": A SELECTION OF TEXTS

(Recent Soviet discussions on the concept of ideology)

It is well-known that Marxism has incorporated the entire history of culture and thought functionally into social history the dynamic nucleus of which (since the decline of primitive society) Marxism sees in the struggle of hostile classes whose existence is rooted in the conditions concomitant with the "mode of production". "Morals, religion, metaphysics and all other ideological forms and the corresponding forms of consciousness thus no longer maintain the appearance of independence. They have no history, they have no development; but men by developing material production and material exchange change, along with this, their real existence, and also their thinking and the products of their thought." (Marx and Engels in their manuscript on the "German Ideology" 1845–46) [1]. Among the various constituents of the mode of production which exert a "conditioning" or "determining" influence on the course of the spiritual evolution of mankind, a central place belongs to *class interests*. The dominating ideas of every epoch have always been, as Marx and Engels wrote in the same text, the ideas of the ruling class. [2] Their function is, above all, to justify the domination and the privileges of this class to itself and to the dominated classes (while the latter also express their opposition against the existing order in ideas).

By "ideology" Marx and Engels frequently understood a "wrong conciousness", some kind of deception concerning the social situation, the motives and the meaning of the actions of a class. A particular case of such a deception is the fact that classes motivate their actions not by their interests but by ideas belonging to a different sphere. In this sense Engels speaks of "ideologists" as of people who regard history merely as an unfolding and an effect of ideas. [3] A characteristic of ideologies is also the idealization of programmatic objectives and, in the case of ruling classes, the idealization of the existing order. With such an apologetic function of ideology is often connected an at least partial indisposition for knowing truth, as Marx demonstrated in the case of the bourgeois economists after the outbreak of the proleterian class struggle: "The economists no longer

Studies in Soviet Thought II, 2 (June 1962).

asked whether this or that theory was true, but whether it was useful or harmful to capital, convenient or inconvenient, politically dangerous or safe. Paid prizefighters took the place of disinterested investigators; evil consciences and malificent apologetics took the place of unprejudiced scientific research." [4]

All this was surely not meant as a complete theory of spiritual life, but rather as the constatation of a limit phenomenon. However, for the followers of Marx, the advocates of a "critical and revolutionary" social theory, this denaturation of mind was the focus of interest and in many instances they developed a robust "sociologism" which converted the history of culture and thought into a phenomenology of religious, moral, philosophical and artistic class-consciousness in the service of the politico-social class-consciousness or into a mere illustration of the politico-social struggle.

In the language of Communism the concept of "ideology" has found a more general meaning than in the above-mentioned texts of Marx and Engels, where ideology is understood as "false consciousness". Even Marx himself occasionally had dropped this specification when he used – in an important place, namely the famous foreword to his *Critique of Political Economy* (1859) – the terms "process of spiritual life" *(geistiger Lebensprozeß)*, "forms of social consciousness" *(gesellschaftliche Bewußtseinsformen)* and "ideological forms" *(ideologische Formen)* as synonyms. [5] To "ideology", then, belong quite distinct domains of spiritual life. They are enumerated in the contemporary systematic of Historical Materialism as: political ideology, legal consciousness *(pravosoznanie)*, morals, religion, science, art and philosophy. [6] The title "ideology" here obtains an axiologically and epistemologically neutral sense, so that it could be applied also to Marxism-Leninism itself which wants to be regarded as a truly scientific ideology.

But this does not mean that the concept of ideology has lost all meaning. First, ideology stands out as the conceptually constructed and systematized nucleus of the whole of spiritual life (as distinguished from "social psychology" which also embraces many non-systematized opinions, emotions and sentiments); secondly, contemporary Soviet theory emphasizes the class-character of ideology. This statement acquires – by the very fact that no distinction is made between ideology and the systematized part of social consciousness and spiritual life – an especially

great importance. The class-character is the general form of party-mindedness *(partijnost')*, and the lack of an explicit distinction between class ideology and possibly existing class-neutral elements in the sphere of spiritual life means total party-mindedness and ideological warfare all along the line. This is precisely the position towards which A. A. Ždanov, Secretary of the CC of the CPSU, wanted to move the Soviet intellectuals, including the philosophers. Ždanov's principal attack against G. F. Aleksandrov, the author of a book on the history of Western European philosophy, was occasioned by the latter's lack of party-mindedness; one of Aleksandrov's general faults was that he always first "fumigated with incense" every philosopher before criticizing him, and that he regarded "every philosopher above all as a colleagues and only then as an adversary".[7]

Under the aegis of an equally all-embracing and inarticulate concept of partisan ideology many offences against the autonomy and even the elementary rules of scientific and artistic work have been committed and have provoked an acute uneasiness in reference to ideology. During the periods of "thaw" after Stalin's death began a re-evaluation of the previous view on ideology. Many remembered the original, depreciatory sense in which Marx and Engels spoke about ideology; they stated that under the despotic and dishonest regime of Stalin the once "critical and revolutionary" Marxism has itself been deformed into an apologetic and servile ideology which veils and embellishes social reality. From this ideology, science and art ought to be radically freed.[8]

Against such extreme demands the leaders of most Communist parties have reacted rather vehemently. They see herein the manifestation of a new "revisionism" and, since the Hungarian events, regard this deviation as the main danger within the Communist movement. Parallel to the struggle against revisionism there is a discussion in the "orthodox" wing of contemporary Marxism-Leninism on how to understand positively the position of ideology and party-mindedness in the whole of spiritual life. A series of publications on this subject have appeared during the last few years, including two systematic textbooks on the entire domain.

Characteristic of the present situation is that several Soviet philosophers have raised their voices against the traditional identification of partisan ideology and socially significant spiritual activity in general. According to the view of some authors, the "ideological" is only one component of

social consciousness. Its distinguishing attribute is to be seen in its social partiality – it expresses the interests and objectives of the classes. The other component, on the nature and the designation of which there are divergent opinions, has its measure *not* in such a particular social instance but shows some universally-human characteristics. The advocates of the traditional, integral or "holistic" conception of the ideologico-spiritual sphere are opposed to such a distinction which seems to them artificial and pedagogically harmful. The following quotations indicate how the dispute between these groups has evolved up to now.
The reader will find the full titles of the writings quoted at the end of this survey.

1. IDEOLOGY AND COGNITION

V. Kelle and *M. Koval'zon* investigate how the elements of cognition *(poznanie)* differ from those elements which the position of the social classes introduces into social consciousness.
"In the development of social consciousness it is necessary to distinguish two associated trends: the cognitive process determined by the interests of the real life practice of social man, the accumulation of objective knowledge of nature and society, and, second, the ideological process determined by the conflicting interests of various classes which have been active in history – establishment, development and change of the ideologies of various classes. In real life these two trends are closely connected; sometimes they coincide and can be separated only by theoretical analysis and abstraction. In the ideological process there is a cognitive moment and in the development of cognition there is an ideological aspect. But one must not confound or identify these two trends because social consciousness can be reduced neither to cognition nor to ideology.
"Social consciousness is the totality of the spiritual life of society while ideology is that part of social consciousness which is directly connected with the solution of the social problems arising before society reflecting, therefore, the social conditions which it attempts to change or to consolidate. In a class society the ideology has a class character, i.e. it is a spiritual expression of the economic interests of certain classes." (11–12)
"The bases of cognition are the requirements of man's objective historical practice; its task is to disclose objective laws, to attain truth. ... The bases of the ideological process in an antagonistic class society are the

interests of the classes resulting from their position in society and from their conditions of life; its immediate task is the spiritual expression, foundation and justification of these interests but not the attainment of truth." (16)

"In the various forms of social consciousness the relation between ideological and cognitive elements is different. There are forms of consciousness in which the cognitive element, i.e. the element of objective knowledge, is lacking as in religion; there are other forms of consciousness which by nature are ideology but which contain a cognitive moment as, for example, political ideology, legal and moral consciousness; further, there are forms of consciousness which are essentially the combination of ideological and cognitive elements such as philosophy and the arts ...; finally, there are the forms of consciousness which are forms of knowledge of reality. In society there is no pure cognition which is not bound to ideology and the latter, with the exception of religion, is always connected with cognition." (28–29)

2. CLASS-SPECIFIC AND UNIVERSALLY-HUMAN ELEMENTS

V. Tugarinov puts the problem on a broader basis. In question is not only the duality of cognition and ideology (the latter representing class particularism in the domain of theoretical statements); rather in all regions of conscious decision there exist particular, class-conditioned *(klassovye)* and universally-human *(obščečelovečeskie)* contents. At first sight, indeed, it might appear that Tugarinov reserves the term "ideological" for the class-specific contents; but some supplements (see section 3) will show that this is not unrestrictedly his view.

"... in the content of social consciousness are included both ideological and non-ideological elements. In other words, in any form of social consciousness – in the field of science, arts, morals, philosophy – there are, besides the ideas specific to only one class, also ideas common to all or to some classes. In short, in social consciousness there is both a class-conditioned and a universally-human or inter-class content." *(Sootnošenie kategorij,* p. 89).

"Let us first take into consideration science. We cannot say "bourgeois mathematics", "bourgeois physics", etc. We thus *renounce* the application of class characteristics to natural science and we *recognize* that their

essential content has the nature of universally-human truth. The natural sciences also contain, however, an ideological element in some of their conclusions, generalizations, logical deductions, the application of various philosophical premisses, etc." (89–90)

"But what is the situation in the social sciences? In principle it is the same with this difference that in the field of social sciences there are, in general, many more such ideological elements than in the natural sciences. ...However the social sciences are far from being made up of purely class-bound, purely ideological conceptions. (90)

"The same is the case of the arts. The principle of the party-mindedness of art, defended by Marxism against the thesis about their non-partisan nature, does not mean that *everything* in the arts is partisan. ...

"Turning to morals, the author feels some reserves as he will be inevitably accused of defending "supra-class morals", of denying the class-character of morals, etc. But if our critics are able to consider the problem without dogmatic spectacles, ...they will recognize that the question is quite different. The founders of Marxism have brought to light an entirely correct and profound thesis on the class-character of morals, and this in struggle against the contrary thesis on its classless or supra-class character. But they never pretended that *everything* in the norms of morals has a class-character." (90–91)

"The general, universally-human norms of conduct ...are not so few in number as might seem at first glance. ...(Secondly) differences between universally-human and class-bound aspects in morality exist only in a class society which is only a certain stage in the development of mankind. ...Class society is only a transitory and relatively short period in the whole of human history, like a short period of rain in a sunny summer, like a sickness in a young organism, like a historical episode on the iniquity of which future mankind will look back with horror and loathing." *(O cennostjax* p. 126)

3. THE CONCEPT OF IDEOLOGY

Soviet authors do not use the term "ideology", as we already indicated above, in a depreciatory sense.

"If we turn to the founders of Marxism, we find in their works first of all the definition of the concept of ideology as a "false consciousness". In its

contemporary use the term "ideology" has lost its first and most limited sense. We call ideology not only a system of incorrect ideas, but also a system of correct, scientific ideas as, for instance, 'Communist ideology'." (Tugarinov, *Sootnošenie kategorij*, p. 82)

"Marx and Engels have frequently used the term "ideology" in a negative sense, but always with regard to bourgeois ideology. But they have differentiated between the ideology of reactionary classes which falsifies reality and the ideology of the proletariat which is a scientific expression of the needs of social development." *(Formy obšč. sozn.*, ed. G. Gak, p. 14)

For the advocates of the traditional line (with G. Gak as outstanding representative), there exists only the need for a formal delimitation of ideology as the most active and conceptually systematized part of social consciousness. For V. Kelle and M. Koval'zon the "ideological process" is that component which bears the mark of the social class. V. Tugarinov finds, starting out from the factual use of language, that the exclusive connection of ideology with the class characteristic of social thought is not correct. He states:

"a) that ideology belongs to the domain of ideas on society and not on nature; b) that the concept of ideology is related to the concept of forms of social consciousness as a part to a whole, that ideologies are an element of various forms of social consciousness. Which brings to mind the idea that the concept of ideology has a class meaning, i.e. that this concept indicates that aspect of social consciousness which expresses the class interests of different classes. This aspect is, no doubt, present in the concept of ideology. . . .

"However, the interpretation of ideology as a class form of social consciousness is somewhat narrow and does not entirely correspond to the contemporary use of this concept. We say "religious ideology", "military ideology", "ideology of humanism", etc. Of course, religion has class roots; of course, in the concept of military ideology is expressed that which each class has contributed to the science of war; of course, every historical form of humanism includes a class aspect. However, using these concepts, we do not express this class aspect but the difference between the religious and secular, non-religious, form of thought, the difference between the human and the violent, inhuman, way of thinking and acting, etc. It is evident that ideologies should be taken in a broader sense without necessarily being limited to class features.

"Thus, social consciousness includes many forms, systems of ideas and ideologies differentiated in various dimensions: a) the dimension of *different ways of reflecting reality* – here we distinguish science, arts, morals, philosophy, religion; b) the dimension of *class differences and antagonisms* – here we distinguish the proletarian, bourgeois, petty bourgeois, peasant, etc., ideologies; c) the dimension of the *essentially different approaches to single aspects of life* – we here distinguish the religious and secular (areligious), humanist, pacifist, nationalist and other ideologies." *(Sootnošenie kategorij,* p. 82–83)

4. OBJECTIONS AGAINST THE DISTINCTION BETWEEN IDEOLOGY AND COGNITION

The book of V. Kelle and M. Koval'zon has induced several of their colleagues to send reviews to the "Voprosy filosofii". The editorial board published one *in toto* and the others in extracts. In the review written by *G. M. Gak, P. A. Račkov, E. X. Stepanjan* and *A. Ja. Čugaev* we read:
"If in social consciousness, as the authors state, are active two trends – one cognitive and scientific, and the other opposed to it, ideological and non-scientific – then the notion 'scientific ideology' as opposed to 'non-scientific or anti-scientific ideology' loses any sense. The contraposition *(protivopostavlenie)* proposed by the authors between cognitive and ideological elements as two opposite processes does not correspond to reality and does not agree with the statement made by V. I. Lenin in the article 'Three sources and three component parts of Marxism'; 'Exactly in the same way as the knowledge *(poznanie)* of man reflects nature existing independently of him, i.e. matter in evolution, the *social knowledge (obščestvennoe poznanie)* of man (i.e. various views and doctrines – philosophical, religious, political, etc.) reflects the *economic structure* of the society.' (*Soč.,* vol. 19, p. 5) As we see, Lenin defines all forms of social consciousness – i.e., also the ideological forms, ideology – as forms of *cognition.*" (*VF* 1960, 8, 175)
Here are two sections from the editorial survey of the other reviews:
"The attention of the reviewers is, of course, mainly concentrated on the conception advanced by the authors of the book which consists in the distinction between the cognitive and ideological elements in social consciousness. Not all the reviewers take the negative attitude towards the

position of the authors of the book which has found its expression in the above review. On the contrary, as Professor *M. Džunusov,* Ph. D., (Frunze) points out in his review, the distinction between the two elements in social consciousness shows the creative maturity of the authors of the book *Forms of Social Consciousness*'. He believes that the authors are right in pointing out the inadmissibility of both opposing and identifying these two elements which inevitably exist in a class society. (177)

"Taking a negative attitude towards the book's conception of the relation between the cognitive and ideological aspects in social consciousness, *I. Mindlin* (Moscow) is of the opinion that the distinction made within the spiritual life of society is artificial. In fact, the life of the society can be subdivided into material and ideological (i.e. spiritual). . . . Consequently, in a class society consciousness cannot be unique but has a class character; it reflects that acute struggle between the classes which takes place in the society and is the main force in history. This struggle permeates all forms of social consciousness, including science, from the beginning to the end." (179)

A criticism of Kelle-Koval'zon's distinction is also offered by V. Jadov who regards ideology not as a peculiar component but as the whole of social consciousness; he refrains, however, from emphasizing too unilaterally its class character: every ideological process is at the same time, to one degree or another, also a cognitive process. (*Ideologija,* p. 18) His own characterization of ideology reads as follows:

"Ideology is a reflection of being through the prism of class interests. Consequently, by its essence it is not able not to be a cognitive process, although the specific function of ideology, the social accent of social views, does not consist in cognition as such but in the fact that it is theoretical class consciousness." (20)

5. A CRITICISM OF TUGARINOV'S DEFINITION OF IDEOLOGY

Apparently the differentiated characterization of ideology given by Tugarinov contains an element which is not quite easy to describe and to subsume under a schema of classification, namely those "essentially different approaches to single aspects of life", as nationalism, pacifism, humanism, religiousness. V. Jadov objects against establishing a special criterion under which such ideological characteristics might be classified as complete ideologies.

"It is true that class interest is the basic object of ideological reflection only in political and, partially, in legal views. In all other cases the class-character of ideology appears in the fact that every phenomenon is here viewed through the prism of class interest. Whence we cannot agree with the view of V. P. Tugarinov who says that the conception of ideology as a class form of social consciousness is too narrow, not corresponding to the contemporary use of this concept. . . .(Here follows a quotation which we reproduced above) Is it not the case that the arguments introduced here support the opposite point of view? What does it mean to oppose the ideology of humanism to the ideology of contempt of man? As Tugarinov himself notes, such an opposition is always concrete. For example, one can view contemporary imperialist ideology, comparing it to bourgeois humanism of the past or to proletarian humanism of our time. One can, of course, oppose the whole line of humanism to the whole line of anti-humanism, calling both of them ideology, just as one can oppose progressive to reactionary ideologies all along the development of history. In this case we wish to draw attention only to one aspect of each of the class ideologies mentioned, to stress some general characteristics in their continuous development – specifically, humanism. . . .All of these are different general characteristics which are common to many class ideologies or which describe different aspects of one and the same class ideology." (17–18)

We do not believe, however, that the problem has been settled by these remarks. There are two reasons why the commentator doubts whether only integral class positions might establish the integral unity of an ideology: first, there may be social divisions "below" or even apart from the class division (as defined by Lenin); people organize and engage themselves, practically as well as ideologically, not only on a class basis but also on the basis of various differently dimensioned particularisms (and sometimes monomanias). Secondly, if ideology is defined as a system of views on social affairs which is rooted in a certain social axiology and commits people to a definite type of behaviour, the question arises whether a classless society as envisaged by Communism will have an ideology or not. As far we can judge, ideology will not "wither away", but a unified, all-embracing ideology will take the place of the former ideological class particularism. – Thus it seems that the class principle is in certain respects too general and coarse while it is too special and narrow in other respects.

6. THE BACKGROUND OF THE DISPUTE

The summary way in which the traditionalists maintain the social party-mindedness of spiritual life may serve as the theoretical justification of an equally summary and "totalitarian" pattern of ideological party leadership in all fields and ramifications of intellectual and artistic work, as well as a pattern of universal, all-permeating ideological warfare in the organizational form of strictly disciplined monolithic blocs, without any blurring of the border-lines or "fraternization".

"Each ideological form fulfills a definite social function in accordance with its specific nature, but all forms together, in the final analysis, serve the basic social interests and, in a society divided into classes, they serve the basic interests of definite classes. These interests constitute a prism through which the classes perceive the image of the world and evaluate its phenomena. The interests of the basic classes in an antagonistic society are in opposition and this leads to contradictions of social consciousness, conditions an irreconcilable ideological struggle and an antagonism in the spiritual sphere. ...Among all class interests the economic and political are basic, most important and serve to determine the position of the class in society. ...Whence the particular, leading place of political ideology, of the political ideas and theories, in the system of social consciousness, in the whole of the spiritual life of class society.

"This problem has taken on particular importance, both theoretical and practical, in our times. It is closely connected with theoretical justification of the principle of the party-mindedness of ideology and of party leadership in the various domains of the spiritual life of society. For a long time and even now various enemies of Marxism as well as deviationists from Marxist teaching, opportunists of all kinds and revisionists, have attacked and continue to attack the Communist Party because it actively leads the development of the arts, literature, philosophy, etc. ...But the idea of non-partisan thought *(bespartijnost')*, as Lenin has taught, is bourgeois; it is promoted by bourgeois ideologists in the struggle against the proletarian ideology. ...

"It will hardly be denied by anyone except the vulgarizers, that the achievements of physics, chemistry, biology, etc. ... can be used with more or less the same success by different classes. ...The exaggerated underlining and propagating of the neutral character of natural science in

relation to ideology can be profitable only to those who are fighting the progressive, revolutionary conclusions from generalizations of the data of the natural sciences." *(Formy obšč. sozn.*, ed. G. Gak, pp. 23–26)

The innovators do not deny, as we saw, the class components in spiritual life and the significance of ideological struggle; they do not want to tear their own, Marxist-Leninist, philosophy out of its social and political engagement. But they are opposed, as it seems, to an exaggeration of *"partijnost'"*, to the total submission of spiritual life to the exigencies of party policies, to the widening of the legitimate ideological struggle into total ideological war. In other words, it is for them a question of the "right measure". They certainly know that the sectarian seclusion of Soviet intellectual life and a withdrawal into its own tradition has lead to many grotesque distortions and primitivisms and thereby inflicted considerable damage on Soviet society. We present here only one particular conclusion drawn by Kelle and Koval'zon.

"Since philosophy arises from class relations, politics exercise, of course, a direct and determining influence on the development of philosophy. This means that philosophy should in no case be separated from politics. But does it also mean that we could look for a direct political equivalent to all philosophical ideas? ... Reducing philosophy to politics would mean the end of a scientific history of philosophy and of philosophy as a science. If we do not take into consideration the specific nature of philosophy, its difference from politics, then the cognitive element is entirely eliminated from the history of philosophy and the progress of philosophical knowledge is disregarded. The whole history of philosophy would appear to be a struggle between various attitudes toward life *(mirovozzrenija)*, an illustration of political struggle. Reducing philosophy to politics leads consequently to *"kon'junkturščina"*, to endeavors to adapt the solution and consideration of philosophical problems to the changing requirements of concrete policies..." (236–237)

REFERENCES

1. Recent German edition: K. Marx, F. Engels: *Werke.* Bd. 3. Berlin, 1956. S. 26–27.
2. *ibid.* S. 46.
3. Letter to F. Mehring, 14 July 1893. *Ausgewählte Werke* Bd. II, S. 467–471.
4. *Das Kapital* Bd. I, "Nachwort zur 2. Auflage" (1873).
5. *Zur Kritik der politischen Ökonomie.* Berlin 1947. S. 13.
6. According to Kelle and Koval'zon. There is some variation in other texts.
7. *VF* 1947, 1, .
8. Thus L. Kolakowski wrote: "By ideology we understand the sum of the views which serve a social group (a class, but not only it) in organizing the values which express the mystic consciousness of this group and its activity. . . . Thus, we use the concept something like Marx. . . . For Marx the concept of ideology contained a negative judgement, it denoted at any rate a deformed consciousness." "*Der Mensch ohne Alternative*". (German translation of several essays) München 1960. S. 24–25.

V. Ž. Kelle, M. Ja. Koval'zon: *Formy obščestvennogo soznanija* (The Forms of Social Consciousness). M. 1959, 263 pp.

Formy obščestvennogo soznanija (The Forms of Social Consciousness). Ed. G. M. Gak and others. M. 1960, 369 pp.

V. P. Tugarinov: *Sootnošenie kategorij istoričeskogo materializma* (The Interrelation Between the Categories of Historical Materialism). L. 1958, 118 pp.

V. P. Tugarinov: *O cennostjax žizni i kul'tury* (On Values of Life and Culture). L. 1960, 156 pp.

V. A. Jadov: *Ideologija kak forma duxovnoj dejatel'nosti obščestva* (Ideology as a Form of the Spiritual Activity of Society). L. 1961, 122 pp.

Spornye položenija v interesnom knige (Questionable Statements in an Interesting Book). *VF* 1960, 8, pp. 174-180. (Reviews of the book of Kelle and Koval'zon)

NOTES AND COMMENTS

The following is a list of reports made at philosophical (methodological) seminars in 1960 and 1961. We make no claim to completeness since our only intention is to give the Western reader a general idea of what Soviet philosophers are currently discussing.

Cybernetics and Mathematics (*VF* 1961, 1, 150)

Electronic Calculators and the Nervous System (*VF* 1961, 1, 152)

On the Mechanism of Sight (*VF* 1961, 1, 154)

The Training of Man and of the Machine (*VF* 1961, 1, 156)

The Role of the Doctor in the Scientific-Atheistic Training of Workers (*VF* 1961, 4, 151)

On the Classification and Cooperation of Sciences (*VF* 1961, 5, 138)

Differentiation and Inter-Penetration of the Sciences – Two Opposite Tendencies of the Single Process of the Development of Science (*VF* 1961, 5, 138)

V. I. Lenin and the Physico-Mathematical Sciences (*VF* 1961, 5, 138)

Physical Properties and the Reciprocal Transformation of Different Types of Matter in the Light of V. I. Lenin's Works (*VF* 1961, 5, 138)

The Philosophical Works of V. I. Lenin and Present-Day Problems of Physiology (*VF* 1961, 5, 138)

V. I. Lenin and Some Questions of Contemporary Science (*VF* 1961, 5, 138)

Some Philosophical and Methodological Questions of the Theory of "Elementary" Particles (*VF* 1961, 5, 139)

On the Concept of "Elementary" Particle (*VF* 1961, 5, 139)

Uniqueness of the Derivation of Tensors of Energies and Impulses (*VF* 1961, 5, 140)

The Law of the Unity of Opposites and its Manifestations in Physical Processes (*VF* 1961, 5, 140)

The Law of Negation of Negation and its Manifestations in Physical Processes (*VF* 1961, 5, 140)

Methodological Questions of Quantum Theory (*VF* 1961, 5, 140)

Philosophical Problems of Atomic Physics (*VF* 1961, 5, 140)

Criticism of the Views of the Copenhagen School in Quantum Theory (*VF* 1961, 5, 140)

Perspectives of the Development of the Doctrine on Symmetry (*VF* 1961, 5, 140)

The Use of the Theory of Symmetry in Contemporary Physics of "Elementary" Particles (*VF* 1961, 5, 140)
Some Problems of Space and Time in the Light of the Leninist Conception of the Essence of Physical Theory (*VF* 1961, 5, 140)
Statistical Regularities in Acoustics (*VF* 1961, 5, 140)
On the Measurement of Movement (*VF* 1961, 5, 140)
On the Unity and Inseparability of Physics, Chemistry and Mechanics in the Study of Vital Phenomena and on the Specific Character of Biological Processes and Uniformities (*VF* 1961, 5, 140)
On the Irreducibility of Biology to Physics and Chemistry (*VF* 1961, 5, 140)
On the Limits of the Application of Physics and Chemistry to the Study of Biological Processes (*VF* 1961, 5, 140)
On the Pooling of Resources of Biologists, Physicists and Chemists for Knowledge of the Laws of Life (*VF* 1961, 5, 140)
The Second Law of Thermodynamics and the Evolution of Living Organisms (*VF* 1961, 5, 141)
Criticism of Contemporary Mechanist Theory of Life (*VF* 1961, 5, 141)
The Rise of Biochemical Regularities as the Result of the Development of Physical and Chemical Forms of Movement of Matter in the Living Body (*VF* 1961, 5, 141)
Errors in the Reduction of Higher Forms of Movement to Lower and of Lower to Higher (*VF* 1961, 5, 141)
The Biological Form of the Movement of Matter and the Path to Knowledge of it on the Basis of the Contemporary Accomplishments of Physics, Chemistry and Biology (*VF* 1961, 5, 141)
The Species in Botany; the Objective and Subjective Approach to Understanding of it (*VF* 1961, 5, 142)
External and Internal Contradictions in the Movement of the Organic World (*VF* 1961, 5, 142)
The Dialectical Essence of Organic Systems (*VF* 1961, 5, 142)
The Processes of Species-Formation and the Evolution of the Animal Life of the Ocean (*VF* 1961, 5, 142)
The Knowledge of Nature – a Process of Penetration from Appearance to Essence (*VF* 1961, 5, 142)
On Technical Biology (*VF* 1961, 5, 142)
The Concept of Progress in Organic Nature (*VF* 1961, 5, 142)

Geology in the Investigations of Darwin (*VF* 1961, 5, 142)
Historicism in Geochemistry (*VF* 1961, 5, 143)
On the Dialectical Development of Mineralogy (*VF* 1961, 5, 143)
The Development of Biogeochemistry as a Science (*VF* 1961, 5, 143)
On the Classification of Sciences and the Place of Geography in the System of Sciences (*VF* 1961, 5, 143)
The Methodological Bases of the Criology of the Earth (*VF* 1961, 5, 143)
Contemporary Problems of Communist Education (*VF* 1961, 5, 144–150)
The Nature and Problem of Sociological Theory (*VF* 1961, 5, 151)
On the Methods of Concrete Sociological Investigations (*VF* 1961, 5, 151)
The Working Class and Technical Progress (*VF* 1961, 5, 151)
Automation in the USSR and the Change of the Content and Character of Work (*VF* 1961, 5, 152)
The Role of Biology in the Fight for a Communist Weltanschauung (*VF* 1961, 5, 155)
On the Reciprocity of the Biological, Physical and Chemical Forms of the Movement of Matter (*VF* 1961, 5, 155)
Life in the Light of Contemporary Scientific Data (*VF* 1961, 5, 155)
Symmetry and Asymmetry as one of the Forms of the Appearance of the Law of the Unity and Conflict of Opposites in Nature (*VF* 1961, 5, 156)
Mičurian Doctrine – the Highest Stage of the Development of Darwinism (*VF* 1961, 5, 158)
The Remnants of Islam and Paths toward Elimination of Them (*VF* 1961, 5, 159–162)
The Significance of V. I. Lenin's Book *Materialism and Empiriocriticism* for the Development of Contemporary Science (*VF* 1961, 6, 136)
Contemporary Doctrine on the Structure and Movement of Matter (*VF* 1961, 6, 136)
The Philosophical Bases of the Teaching of I. M. Sečenov and I. P. Pavlov (*VF* 1961, 6, 136)
The Materialist Dialectic on the Relation of the Physical and Psychic (*VF* 1961, 6, 136)
Philosophical Problems of Contemporary Medecine (*VF* 1961, 6, 136)
Philosophical Problems of Science (*VF* 1961, 6, 137)
Bonds Between Philosophy and Science (*VF* 1961, 6, 137)
Dialectical Materialism and Contemporary Questions of Science (*VF* 1961, 6, 137)

Criticism of Reactionary Conceptions in Contemporary Philosophy and Their Influence on Medecine Abroad (*VF* 1961, 6, 137)
Science as a Form of Social Consciousness (*VF* 1961, 6, 138)
Discussion of A. K. Maneev's *Toward a Criticism of the Foundations of the Theory of Relativity* (*VF* 1961, 6, 139)
Determinism and the Problem of Moral Responsibility (*VF* 1961, 7, 154)
The Increasing Significance of the Moral Category "Conscience" in the Process of Communist Education of Workers (*VF* 1961, 7, 154)
The Education of Soviet People in Honor and Dignity as the Most Important Aspect of Communist Morality (*VF* 1961, 7, 154)
Happiness and Morality (*VF* 1961, 7, 154)
The Organisation of Social Control as an Important Means of Educating Communist Consciousness (*VF* 1961, 7, 155)
The Importance of a New Mode of Life for the Formation of the Man of Communist Society (*VF* 1961, 7, 155)
Laws of the Development of Communist Consciousness (*VF* 1961, 7, 156)
Contemporary Phylogenetic Method (*VF* 1961, 7, 157)
The History of the Earth and the Evolution of the Organic World (*VF* 1961, 7, 157)
On Leaps in the Development of Foraminifers (*VF* 1961, 7, 158)
On the Role of the Principles of Relativity and Equivalence in the Construction of the Theory of Einstein (*VF* 1961, 7, 159)
On the Publication of Foreign Literature on Philosophic Questions of Science (*VF* 1961, 7, 159)
New Stage in the General Crisis of Capitalism and the Disposition of Class-Forces in Capitalist Countries (*VF* 1961, 9, 122)
Peace – the Basic Problem Today (*VF* 1961, 9, 123)
On the Transitional Type of Government (on the Governments of National Democracies) (*VF* 1961, 9, 123)
The Fight Against the Imperialist Exportation of Counter-revolution (*VF* 1961, 9, 124)
Tactics of the Communist Parties in the Countries of Western Europe (*VF* 1961, 9, 124)
Automation and Social Progress (*VF* 1961, 9, 124)
The Philosophic Bases of Cybernetics (*VF* 1961, 10, 151)
Philosophic Questions of Logic and Their Practical Realization in the Construction of Automatic Systems (*VF* 1961, 10, 151)

The Methods of Cybernetics and the Possibilities of Their Use in the Development of Evolutionary Doctrine (*VF* 1961, 10, 151)
Perspectives for the Development of Cosmological Theory (*VF* 1961, 10, 151)
Philosophic Problems of the Special and General Theory of Relativity (*VF* 1961, 10, 151)
The Use of Mathematics in Planning (*VF* 1961, 10, 151)
The Physical Bases of Genetics (*VF* 1961, 10, 151)
The Basic Peculiarities of Development in non-Living Nature (*VF* 1961, 10, 152)
The Crystal as Contradiction (*VF* 1961, 10, 152)
The Gnoseological Essence of Physical and Chemical Experiments (*VF* 1961, 10, 152)
The Role of Intuition in Scientific Investigation (*VF* 1961, 10, 152)
Analogy and Model as Means of Scientific Investigation (*VF* 1961, 10, 152)
Criticism of Contemporary Idealistic Theories on Animal Behavior (*VF* 1961, 10, 152)
Problems of Vestiges in Bourgeois Ethnographical Literature (*VF* 1961, 10, 152)
Are there such Things as Macro and Micro-evolution? (*VF* 1961, 10, 152)
Contemporary Geology and its Place in Science (*VF* 1961, 12, 122)
Peculiarities of the Planetary-Geological Forms of the Movement of Matter (*VF* 1961, 12, 123)
On the Geological Form of Movement in Relation to its Other Forms (*VF* 1961, 12, 125)
The Specificity of Biological Metabolism (*VF* 1961, 12, 131)
On the Structure of the Control Systems of Living Nature (*VF* 1961, 12, 131)
On the Role of Physics in the Knowledge of Vital Phenomena (*VF* 1961, 12, 131)
Dialectic as Logic (*FN* 1961, 1, 198)
The Axiomatic Method in Physics (*FN* 1961, 1, 199)
The Dialectico-Materialist and Metaphysical Approaches to the Problem of Identity (*FN* 1961, 1, 199)
Analogy and the Problems of Model-Construction (*FN* 1961, 1, 200)
On the Different Assumptions of Formal and Informal (Content-ful) Logic (*FN* 1961, 1, 200)

On the Gnoseological Nature of Historical Sources (*FN* 1961, 1, 202)
From Representation to Concept (*FN* 1961, 1, 202)
Laws and the Conditions of Their Operation (*FN* 1961, 1, 202)
Some Problems of the Logical Category of Measure (*FN* 1961, 1, 203)
Knowledge as a Creative Process (*FN* 1961, 1, 203)
The Increasing Role of the Consciousness of the Masses in the Course of the Construction of Communism (*FN* 1961, 2, 173)
On the Use of the Laws of Development of the Superstructure in the Practice of Communist Construction in the USSR (*FN* 1961, 2, 173)
The Development of the Ethics of Soviet Society Today (*FN* 1961, 2, 173)
Criticism of Bourgeois Views on the Essence and Role of Soviet Intelligentsia (*FN* 1961, 2, 173)
Education of the New Man (*FN* 1961, 2, 173)
The Place and Role of Social Psychology in Social Consciousness (*FN* 1961, 2, 173)
Scientifico-Technical Progress and the Development of the Person (*FN* 1961, 3, 181)
The Relation Between the True and the Moral (*FN* 1961, 3, 181)
The Development of Moral Convictions and Habits in the Process of Communist Education of Youth (*FN* 1961, 3, 181)
Weltanschauung and Method (*FN* 1961, 3, 189)
Dialectical Materialism and Methods of the Concrete Sciences (*FN* 1961, 3, 190)
Causality, Chance and Necessity in Contemporary Physics (*FN* 1961, 3, 190)
The Physiology of Synapses and the Theory of Knowledge of Dialectical Materialism (*FN* 1961, 3, 190)
Peculiarities of the Development of Chemical Elements (*FN* 1961, 3, 190)
On the Inter-relations of the Laws of Nature and the Laws of Dialectical Materialism (*FN* 1961, 3, 191)
The Problem of Contradictions in the Microcosm and the Methodology of "Complementarity" (*FN* 1961, 3, 192)
The Principle of Correspondence in Contemporary Physics (*FN* 1961, 3, 193)
Some Characteristic Traits of the Development of Physics Today (*FN* 1961, 4, 200)
The Origin and Essence of Life (*FN* 1961, 4, 200)

On the Theory and Practice of Interspecific Hybridization of Cereal Cultures (*FN* 1961, 4, 200)
What is Cybernetics? (*FN* 1961, 4, 200)
Some Problems of Higher Neural Activity (*FN* 1961, 4, 201)
The Investigation of Cosmic Space (*FN* 1961, 4, 201)
Philosophical Questions of Mathematics (*FN* 1961, 4, 201)
Contemporary Physical Representations on Space and Time (*FN* 1961, 4, 201)
Some Problems of the Astronomy of Stars (*FN* 1961, 4, 202)

(T. B.)

According to the outside back cover of *FN* 1962, 1 the *Filosofskie nauki* will – as of 1962 – appear six times a year instead of the usual four. (T. B.)

REVIEWS

Arnold Buchholz: *Der Kampf um die bessere Welt. Ansätze zum Durchdenken der geistigen Ost-West-Probleme.* Stuttgart, Deutsche Verlags-Anstalt, 1961, 255 SS. DM 15.80

There are two sorts of books on recent Soviet thought: those in the first group are technical; they discuss academically philosophical problems where "philosophical" is taken according to one of Bertrand Russell's definitions as meaning, "what is of interest to philosophers only". The books in the second group concern basic problems of *Weltanschauung* and differences between Soviet and Western views regarding great questions about the meaning of life, ethics, religion, etc. Dr. Buchholz's recent book is one of those rare publications which belongs at the same time to *both* classes. As the title indicates, its main subject is the struggle of *Weltanschauungen,* and the author intends to analyze the opposition between them. Yet, simultaneously, he brings a wealth of information about contemporary Soviet philosophy. The author, who is the managing editor of the journal *Osteuropa Naturwissenschaft,* missed practically none of the opportunities offered to a Western thinker to meet Soviet philosophers travelling abroad; then he made a long journey to the Soviet Union and to some other Communist countries. He has read much in the *Voprosy Filosofii* and is well informed about the most recent books published in Moscow. Out of his discussions and readings he has selected a large amount of interesting data. Even if his book contained only that element, it could have been warmly recommended to every non-specialist, for it supplies the best complement to such works as Wetter's *Dialectical Materialism* and the present reviewer's book.

Yet it is not information alone that Dr. Buchholz offers. He selects and presents his material in the light of an explanatory theory. He thinks, namely, that most of the differences existing between the Soviet and the Western philosophies are basically due to a different view of man. In his analyses of Soviet doctrines he shows convincingly that they are, in most cases, conditioned by that view. Thus, he not only gives factual information, but also contributes to a better understanding of the doctrines concerned. Some of the analyses are so good that one may regret the stress placed on anthropological and axiological topics to the omission

of more theoretical problems, like those of pure ontology and logic. However, the aim of the book is not to give a complete account of the Soviet system and its recent developments. As already mentioned, the discussion "between East and West" is its main concern. Here two different elements could still be distinguished. The author believes, rightly it seems, that Western philosophers should discuss with Soviet thinkers. Before going to the Soviet Union, he studied for himself what are the fields in which discussion is possible. Then, while talking with the representatives of Soviet philosophy, he constantly drew their attention to those points. Out of those efforts something like a theory of controversy with the Communists arose, with a clear indication of its possibility and its limits. This is another important contribution of Dr. Buchholz. The other element mentioned is the solutions proposed for the actual spiritual struggle.

The book is divided into three parts. In the first, Communist eschatology is presented briefly and opposed to the "Western" view of the world. The latter is seen as centered on the ideal of freedom. There is no possible compromise between the two. And yet, Dr. Buchholz thinks that Communists and free men *do* have something in common – namely, the desire for peace. However, political peace is not possible, according to him, without spiritual peace. The main subject of the book then is a search for a spiritual peace.

In the second part, the author gives brief but substantial information about the situation of Soviet philosophy (a particularly valuable chapter); then he compiles and discusses a list of main problems which West and East may discuss. They are: Sociology, State and Law, Revisionism and Reformism, the Naturalist World-View, the Theory of Fine Arts, Education, Ethics and Religion. In analyzing these various problems, he finds that the differences of view are not of a technical nature – in practically every case there is, behind the academic problematic, a rather simple question about the nature of man.

Then a third part follows in which some tentative solutions are proposed. After sketching his own philosophical opinions, Dr. Buchholz shows that there are in Dialectical Materialism several "empty fields" – patches of ground where nothing is being said by the official doctrine. One such empty field is the problem of the meaning of human life and of the Cosmos; the problems of intuition and of Dilthey's *"Verstehen"*, of death, of freedom, and of the constitution of man are other fields. These

points may offer the most fruitful possibilities for a serious discussion between Western and Soviet philosophers; here the latter *can* discuss, and the former have something to offer which their partners lack.

The discussions are, however, conceived only as a means toward the great end, spiritual peace. Political peace is necessary if humanity is to survive, says Dr. Buchholz, and political peace is not possible without spiritual peace. We must, so the author thinks, look for understanding, for something common to unite us and to lead toward a peaceful coexistence not only of states, but of minds as well.

Now this point could be easily misunderstood, and this reviewer must confess that he had some trouble at the beginning in grasping what Dr. Buchholz really wants us to do. A superficial reading might suggest that he asks us to transcend our own philosophical position, to look for a compromise with the adversary. This, of course, is not possible – as much because of the Communist concept of freedom, as because of their attitude toward *knowledge*. There is a very impressive quotation, in a book, by a Bulgarian philosopher who explained his capacity to change his philosophy at the command of the Party by his "love of mankind". It is not quite clear if Dr. Buchholz does approve of such a procedure – it may be hoped that he does not. Anyway, it seems that precisely here lies the difference. A free thinker is not allowed to change his opinions on command, even if he believes that such obedience will serve mankind. For a submission of that kind is considered here as immoral in itself, as something one should *never* do.

As long as we have to deal with men who are ready to change their opinions in the above way, there seems to be no hope for a spiritual peace between the philosophers and the slaves of the Party. Furthermore, it is difficult to see how free thinkers could desire a peace of that sort. Are they not bound to desire spiritual *war*, a struggle down to the very destruction of evil and false doctrines? Of course, it is far more sympathetic to talk about peace than to proclaim the necessity of the spiritual struggle, but we are dealing here with questions in which no sympathy should influence a philosopher's decision.

Yet, in spite of some appearances, Dr. Buchholz is not opposed to this view. He thinks that the materialist dogma is the main obstacle to an understanding. He would consequently, so it seems, agree that this must be broken before any hope of understanding can arise. Are there any

chances that the dogma will pass away? The author seems to think that there are. He quotes, among others, a celebrated text of Tugarinov which shows how deep the urge for freedom in the Soviet Union is. It is certain that in all Communist countries there are men who do fight for it, at least on the level of research. It is not certain that there are great chances for such a victory of reason over unreason, to use Professor Jaspers's term, but there seems to be at least *some* chances. What the author says of the inadequate discussion conducted by Western philosophers with the adversary, is very true. Yet, this situation might be improved, if a more efficient philosophical criticism were employed. Such criticism might have some relevance for the development of Soviet thought. Some instances of victories won in that way are known. One such instance is the triumph of that courageous Polish thinker, Professor K. Ajdukiewicz, who by his penetrating and patient criticism won, first, Schaff and then quite a group of Soviet philosophers to his limited but important thesis that no real contradictions can be admitted.

The above remarks do not touch upon all aspects of the complex problematic mentioned and discussed in this book. They may, however, suffice to induce everyone interested in problems of Soviet philosophy to read it. To a non-specialist, it may serve as an excellent introduction into contemporary Soviet philosophy; to the specialist it opens a number of new horizons, for it states some problems and suggests possibilities for future research. It is a challenging and important book, perhaps one of the most significant on this subject since the publication of the work of Berdiaev.

J. M. Bochenski

David Joravsky: *Soviet Marxism and Natural Science, 1917–1932.* New York: Columbia University Press and London: Routledge and Kegan Paul, 1961. xiv + 433 pp. $ 7.50

This book, written by an historian, is a major contribution to the intellectual history of the Soviet Union, but it is a work of the first importance for philosophers as well. The bulk of the volume is an extended historical treatment of the struggle between the 'Deborinite' and 'mechanist' philosophers of science in the 1920's. The so-called 'mechanists' were a loosely-

knit group of natural scientists and philosophers whose central tenet was that a Marxist philosophy of science could not be produced *a priori* by Marxist philosophers, but had to be worked out for each science within its empirical context. They tended to be quite 'positivistic' in their philosophy, i.e., most of them accepted the thesis of reductionism in the sciences and had misgivings about the existence of any philosophical subject-matter *per se* over and above the positive sciences. In general, they tended to defend the autonomy of the sciences against *a priori* philosophical intrusion. The 'Deborinites' consisted of Deborin and a tightly-knit group of his philosophy students, plus a few scientists. Their views were essentially Deborin's views, and when systematic ambiguities are discounted, their central view was the primacy over science of materialism as interpreted from the point of view of Hegelian dialectics; Deborin's *bêtes noires* were the non-Marxist 'bourgeois' scientists who still formed the vast majority of Soviet scientific personnel in the 1920's.

Besides treating the clash of these factions, Joravsky has also included valuable sections on the ambiguous tendencies towards metaphysics and positivism in pre-Revolutionary Marxism, on the so-called 'Cultural Revolution' by means of which the Bolsheviks tried to transform 'bourgeois specialists' in science into 'red specialists', and the ensuing ideological upheavals in physics and biology up to 1932.

Joravsky's scholarship is impressive. He has mastered a range of source material which can only be described as staggering, and the 1238 footnotes and 32-page bibliography will prove invaluable to the researcher who wishes to consult the original sources. A preliminary word about Joravsky's historical method is necessary, for it is a method which will be both the most significant lesson of this book for philosophers and simultaneously its single disappointing feature, as will be explained at the conclusion of this review. Joravsky's implicit assumption seems to be that one cannot successfully analyze the philosophical issues for what they are without knowing, and taking account of, the contemporary historical background which influenced the development of the philosophical issues. This is not to imply that a philosopher must know Lenin's biography by heart before he can critically evaluate any of Lenin's philosophical writings, but it does mean that a closer attention to historical circumstances will lessen the possibility of an erroneous interpretation of philosophical works which are as context-dependent as those of the

Soviet Marxists. By giving the detailed concrete background of a number of major events and publications in Soviet Marxist philosophy, Joravsky has laid to rest a number of misconceptions current both in the West and the Soviet Union.

For example, Joravsky spends nearly 25 pages retracing the origin of Lenin's *Materialism and Empirio-criticism* (1909) in such a way as to conclusively prove wrong both Bertrand Wolfe and the Soviet philosophers who view the book as primarily a political tract against dissidents within the Bolshevik faction. Joravsky's extended coverage makes it clear that in 1907–08 Lenin strenuously opposed the linkage of epistemological issues and politics, and that Lenin's concept of 'partyness' *(partijnost')* in philosophy was not the narrow sense – i.e. the ideological control of philosophy by the Communist Party's Central Committee – which has been in vogue in the U.S.S.R. since the early 1930's. Rather, for political reasons, Lenin kept political factions and philosophical factions from resolving into one another.

Another myth which Joravsky lays to rest is the legend that already in the 1920's there were direct and conscious connections between the factional struggle within the Party and the controversies in the philosophy of science. Joravsky makes untenable Raymond Bauer's speculation that Stalin secretly decided to make the Deborinite position official in order to gain 'a powerful weapon' against the right deviation. Joravsky discounts this by marshalling some well-established facts which definitely not only do not lend themselves to such a speculation, but indicate that Stalin until 1929 was largely indifferent to the philosophical battles. For their part, the philosophers scrupulously tried to keep the philosophical conflict separate from the political quarrels in the Party.

Finally, Joravsky makes it clear that only inadequate attention to the facts could lead Lewis Feuer and others to the conclusion that relativity theory was 'rejected by the majority of Soviet philosophers and physicists'; as Joravsky points out, in the 1920's the Soviet community of physicists actively shared in the international development of the new physics. The so-called 'crisis' in physics was not a crisis in physics itself, but a crisis in the Bolsheviks' ideological appraisal of physics. The physicists in general were untouched by the philosophers' conflict over relativity, for they took relativity and quantum mechanics for granted or else worked in fields where the latter were not applicable. The opposition of (A. K.) Timiriazev

to relativity was an exception which seems significant only because of the silence of the vast majority of outstanding physicists who accepted relativity. Not until 1929 and after did Ioffe, Frenkel, Tamm and others feel compelled to come to the defence of relativity publicly. Joravsky also dissipates the legend, still current in the U.S.S.R., that the Deborinites were in favor of relativity theory and the mechanists were against it. In fact, members of both factions credited Einstein as unwittingly confirming the materialist view of geometry as a branch of physics, the denial of absolute space and time separate from matter, and the unification of such concepts as mass and energy. As the mechanist S. Ju. Semkovskij stated in 1926, except for Einstein's assumption of a finite universe, the theory of relativity "not only does not refute dialectical materialism but, on the contrary, is a brilliant confirmation of its correctness."

Joravsky's account of the tangled conflict between Deborin and his students on the one hand and the mechanists on the other is far too detailed to do justice to here. Whereas Gustav Wetter's *Der dialektische Materialismus* (1st German ed., 1952) relies heavily upon secondary sources critical of mechanism in giving an exposition of the mechanists' position, Joravsky's account is more accurate, and with the exception of Bukharin (who seems in Joravsky's opinion to be so removed from the conflict in philosophy of science that he need not be counted among the mechanists), more complete. Moreover, Joravsky's picture of the two factions differs considerably from that of Prof. Wetter, who tends to downgrade the 'positivistic' mechanists and take the metaphysical statements of the Deborinites at their face value. Jorvasky lets the mechanists render a respectable account of themselves, and shows Deborin as something of the ideological opportunist which he was. (For a somewhat more sympathetic and more philosophical account of Deborin, see René Ahlberg's *"Dialektische Philosophie" und Gesellschaft in der Sowjetunion* (Berlin, 1960), and "Deborin, Forgotten Philosopher", *Survey,* No. 37 (July–Sept 1961), pp. 79–89).

Admittedly, Deborin is one of the more difficult persons to assess in Soviet philosophy precisely because he is a curious mixture of unquestioning rigidity regarding the importance of Hegelianism, and flexibility as regards the Party line. As Joravsky aptly expresses it, Deborin had a "remarkable ability to bend with the wind and remain rooted in one spot." Consequently one never knows whether to accept Deborin's statements at their

face value or not, particularly where the relationship of dialectics to natural science is concerned. The mechanists accused Deborin of being an arrogant metaphysician who wanted to dictate, without regard for empirical considerations, which scientific theories were acceptable or not. Joravsky has accumulated a number of quotations which bear out this trend, whereas Wetter's quotations from Deborin are chosen to show that Deborin was not an *a priori* theorist who wanted to exclude or supersede empirical inquiries. The truth would seem to lie in Joravsky's comments that it is possible to accumulate quotations of both types from Deborin's works, since Deborin, appropriately enough for a dialectician, had both metaphysical and positivistic attitudes towards science, and replied to the accusation of inconsistency by saying that truth is contradictory or dialectical. However, of the Deborinites in general, it can be said that, because they were trained almost exclusively in the history of philosophy, they had little or no knowledge of the concrete sciences, and were often unwilling to take a stand on specific issues within a given science. This certainly explains their indifferent attitude towards the conflicting theories in Soviet psychology, and their acceptance of relativity because it was accepted by practicing physicists. Deborin seems to have been interested not in having the scientists endorse any particular set of theories, but rather in preventing them from extrapolating from their theories to some sort of universal ontology and methodology. Deborin sought primarily a prior commitment from the scientists which would be equivalent to recognising the primacy of the dialecticians in the field of methodology and *Weltanschauung,* after which the scientists were free to do what they pleased where particular scientific theories were concerned. The conflict between the Deborinites and the mechanists in the philosophy of science did not arise over Mendelian genetics or Einstein's theory, but rather began with such non-scientific philosophical issues as Hegel's position in dialectics or the definition of 'ideology'.

Joravsky traces the ultimate cause for the victory of the Deborinites to the lack of success of the mechanist program for winning natural scientists over to dialectical materialism. The authorities were anxious to make the speediest possible conversion of the bourgeois specialists to red specialists, and Deborin's demand that scientists *a priori* accept dialectic and materialism on the basis of Hegel's and Engels' authority seemed quicker and surer to the Party leaders than the mechanists' relatively slow, intellectual

methods of persuasion. By the late 1920's, the government was impatient for red specialists in science, and favor fell to the 'swift', i.e. the Deborinites. The victory, however, proved to be short-lived. In less than a year, Deborin was forced to recant, and his theoretical philosophical views were dropped in favor of a vague philosophy of 'practice'. Joravsky traces this to Stalin's December 1929 speech to the agronomists. Joravsky calls the anti-Deborin group led by Judin and Mitin 'the Bolshevizers', since their aim was the 'Bolshevization' or *politizacija* of philosophy. As the result of this 'Great Break' *(perelom),* Stalin became *the* philosopher, and other philosophers were to follow his lead. The resulting sterility of most Soviet philosophical writing until the late 1940's is well known: endless strings of quotation from Stalin and the Marxist-Leninist 'classics'. Scientists were asked, after the Great Break, to 'reconstruct' their sciences in accordance with the principles of Marxism-Leninism.

In his conclusion, Joravsky contends that while the roots for this ultra-partyness of philosophy and the suppression of critical discussion were implicit in Leninism, it was only Stalin's iron stubbornness which could bring it into being and maintain that Leninism could lead *only* to these consequences. Joravsky's concluding remarks are a devastating indictment of Stalinist ideological conformity, and he ends with the provocative questions: "Fearing senior natural scientists as ideological aliens behind their new Marxist masks, and restricting philosophers to beading quotations in standard patterns lest they undermine the Party's monolithic unity, how could Soviet Marxists *have* further debate on the philosophy of science? Calling on scientists to prove the genuineness of their conversion by participating in the 'reconstruction' of the sciences, pointing to 'practice' as the criterion of truth, and defining it so broadly as to include everything from sense data through technology to proven scientific theories and the Party's policies, how could Soviet Marxists *avoid* further debate on the philosophy of natural science? The contradictions that dialectical materialism inherited from the pre-revolutionary period seem almost trifling by comparison with those that were added in the first phase of Soviet Marxism and handed on to the second." (pp. 313–14).

In summary, Joravsky's patient historical method has produced an excellent book which any student of Soviet philosophical studies will do well to consult. That such historical background is necessary to avoid erroneous philosophical interpretations is amply proved by Joravsky's

'refutations' cited above. Yet in concentrating so hard on the historical aspect of these philosophical conflicts, Joravsky has not permitted himself any philosophical appraisal of them. It may seem unjust to criticize an historian for not having written a philosophical book, but Joravsky's grasp of the philosophical issues so obviously exceeds his modest treatment that one only wishes that he had chosen to go on and give us his philosophical appraisal as well. It is to be hoped that in his sequel on Michurinist biology he will not only retain his impeccable historical scholarship but also venture to do some philosophical analysis.

D. D. Comey

Aleksandr Sergeevič Esenin-Vol'pin, *Vesennij List*. Aleksandr Sergeyevich Yesenin-Volpin, *A Leaf of Spring* (Russian original with English translation *en regard* by George Reavey). New York: Frederick A. Praeger, 1961. 173 pp.

This is an unfortunate book: unfortunate because of the circumstances under which it was written, and more unfortunate because of the circumstances under which it was published. The former is the fault of the Communist regime in the Soviet Union, and the latter must in the end be the fault of the publisher, Frederick A. Praeger. The author has been caught in between, and although the publisher seeks to assure us that the peculiar manner in which the manuscript was obtained and published was in accordance with the author's wishes, this reviewer knows that this is not quite the case. Since the author cannot now speak for himself, the reviewer, who is a personal friend, feels compelled to register a protest in Esenin-Vol'pin's behalf, and to dispel some of the illusions about the book circulated by both the publisher and unwitting reviewers.

In the summer of 1959, A. S. Esenin-Vol'pin, a young Russian mathematical logician and poet, turned over some thirty of his poems (all but two of which were written between 1941 and 1951) to someone visiting Moscow, with the request that they be taken to the West, saying "I emphatically ask that all of them which anyone considers to be worthy of publication be published." (Introduction, p. 6). Together with these poems, Esenin-Vol'pin sent a thirty-page essay (hastily written in one day

just before the visitor's departure from Moscow) to which he gave the title "A Free Philosophical Treatise, or An Instantaneous Exposition of My Philosophical Views".

The publisher has unfortunately chosen to include this "philosophical essay" in the volume of poems, even a part of it which the author specifically requested not be published. Aside from the fact that this hasty, rambling non-essay is not representative of Esenin-Vol'pin's actual philosophical views (which the publisher or translator could have easily ascertained by consulting Esenin-Vol'pin's published works and/or philosophers in the West who are familiar with them), the work is so disconnected that the motivation for publishing it would seem to lie less in its intrinsic philosophical merit than in its propaganda value.

The type-setting in Russian (including complete title pages, Russian translations of the publisher's lengthy comments) suggest that there is hope that the book will be circulated inside the Soviet Union. The publisher claims that "the poems and the essay are among the most important documents to come from behind the Iron Curtain." (p. 3). It does not follow that anything good will result from their returning behind the Iron Curtain. The poetry in the book is already known to most Soviet intellectuals who care about it, and the "instantaneous philosophical treatise" will most likely fall on deaf ears (for reasons which will be made clear in the last part of this review).

The chief justification for this book is that the poems it contains will now be available to the *Russian-reading* public of the West – and perhaps in the end, this will be justification enough, for the poems are important. Some of Esenin-Vol'pin's poems surpass those of his father, Sergej Esenin. They are deeply moving – and unfortunately, untranslatable. There is no point in belaboring here the lack of success of the translator, for he had a thankless and probably impossible task. Esenin-Vol'pin's style is so closely wrapped up with his brilliant feel for his native language that form and content seem inseparable. What he says comes over only in Russian, and its terse, carefully rhymed irony falls flat in a free verse translation. One can only add Esenin-Vol'pin's name to the list which includes his father, Pushkin, Blok, Pasternak and all the other Russians whose poetry makes it worth our while to learn the Russian language. No further comment need be made here on Esenin-Vol'pin's poems, since they lie essentially outside the domain of this journal. But before passing on to an

assessment of the "instantaneous exposition" of Esenin-Vol'pin's philosophy, some biographical observations about him as a person are of crucial importance and have an important bearing on how this instantaneous essay is to be evaluated.

Aleksandr Sergeevič Esenin-Vol'pin was born in Leningrad on May 12, 1925, the natural son of the Russian lyric poet Sergej Esenin who committed suicide on December 28th of the same year. His mother is Nadežda Vol'pin, a woman of remarkable cultural interests who presently lives in Moscow and is known for her sensitive Russian translations of French, English and American literature.

Esenin-Vol'pin graduated from Moscow State University in 1946 and successfully defended his candidate's degree in mathematics and physics *(Kandidat Fiziko-Matematičeskix Nauk)* there in 1949, but shortly thereafter, he was arrested on July 21, 1949 near Černovcy, a town close to the Soviet-Rumanian border, and was accused of trying to escape to Rumania. After being jailed in Černovcy, Esenin-Vol'pin was then transferred to Lubjanka Prison in Moscow, and later, in the autumn, he was confined to the psychiatric ward of Prison No. 2 in Leningrad. Less than a year later he was sentenced to Karaganda in Siberia for five years, but was freed during the amnesty proclaimed after Stalin's death.

From 1953 until 1959 he worked for the Institute of Scientific Information in Moscow as a reviewer, abstracter and translator in the English, French and German languages, and occasionally Italian, Spanish and Portuguese. After 1956, he occasionally conducted a *filial* of an officially established seminar on mathematical logic at Moscow State University. This was in effect a ruse perpetrated to allow Esenin-Vol'pin to lecture at the university, although "officially" he could not be made a member of the teaching staff because of his previous difficulties. The *filial* would be scheduled to meet at a different hour than its affiliated official seminar, and the university authorities would be duly notified that the speaker at the first session would be Esenin-Vol'pin. The fact that Esenin-Vol'pin was usually the 'speaker' at the remaining sessions of the *filial* was conveniently overlooked.

These biographical data, and the remarks on Esenin-Vol'pin's illness made later in this review, are regretfully presented here only to counteract the misleading impression of Esenin-Vol'pin's life which the publisher has included in his publicity for *A Leaf of Spring*. The facts given here were

obtained directly from Esenin-Vol'pin by the reviewer during a month-long visit with him in Moscow in the fall of 1958. They arose in the course of extensive conversations ranging over the foundations of mathematics, logic, and philosophy, and represent nothing not already known to the Soviet authorities.

After his release in 1953, Esenin-Vol'pin published a number of works on logic and the foundations of mathematics. In addition to translating Stephen Cole Kleene's *Introduction to Metamathematics* into a Russian edition of more than 500 pages, Esenin-Vol'pin wrote seven lengthy appendices of his own for the Russian edition, which have been translated into English by this reviewer, together with 27 pages of corrigenda given to him by Esenin-Vol'pin in the spring of 1959. Reproductions in English of these appendices and corrigenda have been – and will continue to be – made available by this reviewer to those logicians and mathematicians who have a legitimate interest. These appendices include an alternative proof of Gödel's second theorem, several theorems on the eliminability of equality and indefinite descriptions, formalization of induction up to each ordinal number less than ε_0, and a proof (according to Schütte) of the consistency of classical arithmetic by means of induction up to ε_0. For further details on the contents of these appendices the reader is referred to the review of them in *The Journal of Symbolic Logic* written by this reviewer and Barkley Rosser.

Among the other works on logic and mathematics published by Esenin-Vol'pin are: "On the Relation between a Local and Integral System in Dyadic Bicompacta", *Doklady Akademii Nauk* [DAN] 68 (1949), pp. 441–444; "On the Existence of a Universal Bicompactum of an Arbitrary System", DAN 68 (1949), pp. 649–652; "The Non-Provability of the Suslin Hypothesis without the Aid of the Axiom of Choice in the System of Bernays-Mostowski Axioms", DAN 96 (1954), pp. 9–12; "An Analysis of Potential Feasibility" in the *sbornik* entitled *Logičeskie Issledovanija* (Moscow: Institut Filosofii. Akademija Nauk SSSR, 1959), pp. 218–262; "Towards a Foundation for Set Theory", in the *sbornik* entitled *Primenenie Logiki v Nauka i Texnike* (Moscow: Institut Filosofii AN SSSR, 1960), pp. 22–118.

As anyone who consults these works can easily ascertain, Esenin-Vol'pin is a mathematical logician of the first rank who has produced many novel and provocative ideas on the foundations of mathematics. It was in

recognition of his stature as a logician that in the summer of 1959, the organizing committee of an international symposium on infinitistic methods in the foundations of mathematics to be held in Warsaw from September 2–8 of that year, under the joint sponsorship of the International Mathematical Union and the Institute of Mathematics of the Polish Academy of Science, extended an invitation to Esenin-Vol'pin to attend the symposium and read a paper. However, when Esenin-Vol'pin requested permission to attend the meeting in Warsaw, the Soviet authorities refused. Esenin-Vol'pin sent his paper anyway, entitling it "The Ultraintuitionistic Program for the Foundations of Mathematics"; it was read to the mathematicians at the meeting and also published in *Infinitistic Methods,* the book of proceedings of the symposium. The last work of Esenin-Vol'pin to be published in the Soviet Union was an article "On the Axiomatic Method" in *Voprosy Filosofii,* 1959, 7, pp. 121–126, which went to print only a short time before Esenin-Vol'pin was again taken into custody on what the publisher of *A Leaf of Spring* calls "The euphemistic charge of 'mental instability', for according to the claims advanced by the Soviet authorities, the U.S.S.R. no longer has any political prisoners" (inside covers of the book's dust jacket).

The truth is not so simple, nor so easy to tell. The Soviet authorities do use alleged mental instability as an excuse for incarcerating politically embarrassing individuals. But in Esenin-Vol'pin's case, the charge of mental instability is not necessarily euphemistic. It is almost certain that the Soviet authorities who have locked Esenin-Vol'pin up at certain times in his life have been less interested in giving him genuine assistance for his illness than in simply putting an embarrassing and outspoken individual out of circulation for a while. The fact that Esenin-Vol'pin is sometimes ill has made things very neat and convenient for the Soviet authorities, who, by confining him simply on charges of mental instability without raising further any political charges against him are able to kill two birds with one stone. But it does not follow from this that there are no grounds whatsoever to the charge of mental instability, as the publisher of *A Leaf of Spring* would have us believe, and this fact has direct bearing on the question of whether this one-day exposition of Esenin-Vol'pin's philosophical views should have been published.

This is just one more example of the editorial irresponsibility and lack of research perpetrated in publishing *A Leaf of Spring.* One suspects that it

was not a question of the necessary information being unavailable to the publisher: rather, it seems to have been deliberately avoided. When this reviewer and others familiar with Esenin-Vol'pin's work heard in early 1961 that the publisher had obtained a philosophical manuscript written by Esenin-Vol'pin and intended to publish it, numerous attempts were made to consult with the publisher and provide him with a professionally competent assessment of the manuscript, as well as advise him as to whether it was advisable to publish it in view of the obvious effect it would have on Esenin-Vol'pin's career in the Soviet Union. Every attempt which this reviewer made to obtain information about the manuscript met with a complete rebuff. The publisher's representatives denied knowing of such a manuscript, and it now seems obvious that they intended to publish it for its commercial and propaganda value without any regard for its philosophical merit.

This becomes ever more obvious when one examines the text and translation of the "Treatise" and the introduction written for it by the publisher. This introduction is propagandistic, irrelevant, and exhibits an amazing ignorance of what has been going on in the Soviet philosophical world in the last ten years. As for the text, it is obvious that no competent philosopher or logician so much as had a chance to even proof-read it. Elementary errors are abundant: e.g., on p. 113, although the principle of identity is given by Esenin-Vol'pin in the Russian text on p. 112 as $A = A$, the English *en regard* says: "the principle of identity expressed in the formula $A \supset A$ (if A, then A)". As any freshman who has taken an elementary symbolic logic course could have pointed out, there is a vast difference between the two formulae, and $A \supset A$, a formula of the propositional calculus, is rather different from $A = A$, a formula of the lower functional calculus with identity. The former holds for variables signifying propositions or statements; the latter holds for variables signifying individuals. Those who type-set and proof-read the manuscript were so ignorant of modern logical symbolism that they printed the intuitionistic sign for negation ($\neg$) as the Arabic numeral "7" ! The resulting formulae on pp. 168–169 are logical nonsense.

The translation of the "Treatise" into English also shows in many places a lack of awareness or an insensitivity to the philosophical points which Esenin-Vol'pin is trying to make. For instance, the rendering of the "metatheory" on p. 127. The Russian literally says "this principle", and

not "these principles" as the translator has rendered it. Although there immediately follow 'two' principles, M1 and M2, a correct interpretation and translation of the final Russian *"a inogda i drugoj"* in M1 show that the 'two' do not exist simultaneously. M1 should read "'To understand' means to understand as we understand, and sometimes another principle, namely: [M2]", instead of the translator's "'To understand' means to understand as we understand, and sometimes as another person understands." Again, the whole philosophico-linguistic point on p. 166 which Esenin-Vol'pin hopes to make is rendered ineffective in the English translation. The published translation states: "It is constantly said: 'You *must not* do this' instead of 'You are obligated *not to do* this'" (p. 167, lines 14–15). A translation of the last phrase which is more faithful to the original Russian (and the whole philosophical point at stake) would be: "You must *not-do* this." Likewise, in the next paragraph, the second sentence should be translated: "The simplest grammatical reform in Russian speech would be to introduce this 'mustnot' as a single written word, with the spoken stress in colloquial speech shifted to the 'not'."

There are a number of other translation errors which change the philosophical points at stake:

Page	*Line*	*Original Russian*	*Published Translation*	*Correct Translation*
113	22	*nepreryvnyx*	uninterrupted	continuous
113	25	*seredine*	center	middle
113	31	*ne stali by otricat'*	would not have erected	would not have sought to deny
115	4	*protivopoložnostej*	contradictions	opposites
117	28	*poznanij*	sciences	knowledge
127	34	*svodimosti*	reducing	reducibility
129	31	*predstavlenija*	representations	ideas
133	18	*teorii množestv*	theory of numbers	set theory
135	13	*predstavlenijami*	representations	ideas
143	34	*množestvo*	multiplicity	set
143	36	*nedopustimym*	admissible	inadmissible
145	4	*množestva vsex množestv*	multiplicity of all multiplicities	set of all sets

Replace the incorrect 'discreet' and 'discreetness' by 'discrete' and 'discreteness' *passim.*

As for the contents of Esenin-Vol'pin's 'instantaneous treatise', he starts off by questioning the applicability of the principle of *tertium non datur* (the term he uses for the law of the excluded middle): "In nontrivial cases, this principle does not merit any trust... I grant there may be 'discrete' situations where *tertium non datur* or an analogous principle is applied. But it is conceivable that the very possibility of such situations is the result of idealization. In 'continuous' cases, which are the most natural, the depth of conviction will usually diminish as the subject of the clause which expresses it approaches the 'middle', i.e. the actually non-existent place where we should like to draw the boundary line." (My translation from p. 112). Esenin-Vol'pin attributes generalization of the *tertium non datur* to our desire for simplicity: "We like the division into 'yes' and 'no' – probably because this is simplest." (p. 110). However, he does not give any further reasons for rejecting the principle, nor does he offer any possible alternatives. The effect of this is, curiously enough, not unlike the criticisms of the *tertium non datur* by the dialecticians, and certainly Esenin-Vol'pin does not seek them as intellectual bedfellows! To one who knows Esenin-Vol'pin's more reasoned logical views, this first part of the treatise seems more like an unresolved extension of his ultraintuitionistic approach to mathematical proof. (Russian constructivist mathematicians, like the intuitionists, reject $P \vee \neg P$ as a principle, thus rejecting classical mathematical proofs based on *reductio ad absurdum* arguments, and demand that the existence of any mathematical entity be exhibited constructively). Unfortunately Esenin-Vol'pin leaves this question dangling and begins discussing six 'pseudo-problems': the reality of being (2 pp.), materialism (6 pp.), determinism (7 pp.), monism (3 pp.), faith (3 pp.), and death and immortality (2 pp.). He regards these as 'pseudo-problems' because they arise from the inadequacies of our language and not from actual issues.

His curt, aphoristic treatment of them resembles, at least in style, if not in profundity, that of Georg Christoph Lichtenberg and the late Ludwig Wittgenstein (two brilliant individuals, it might be noted, who also lived alone on the border of mental illness). This reviewer discussed Wittgenstein's *Remarks on the Foundations of Mathematics* and the *Philosophical Investigations* at considerable length with Esenin-Vol'pin in 1958, and was surprised to find that Esenin-Vol'pin had independently arrived at many of the same insights as Wittgenstein without ever having seen the latter's

works. However, none of these insights shines through the 'instantaneous treatise', and the superficial similarity of style is misleading: this treatise was written in one day, whereas the brevity of the *Investigations* is the product of over a decade of arduous thought. Moreover, what at first seems profound in Esenin-Vol'pin's remarks dissolves upon analysis. There are some acute aphorisms, e.g. "Will is loyalty to a tendency", when he is discussing Freudian theory (p. 160). But aphorisms are no substitute for philosophical argument; otherwise Lichtenberg would outshine Kant.

To the extent that Esenin-Vol'pin's views are based on complete skepticism (something which seems to have had considerable appeal for one reviewer of the book), it is rather dull; to quote Esenin-Vol'pin against himself: "All doubts are permissible, but not all of them excite equal interest. The assertion '2 = 2' is beyond doubt, not because of the blasphemous character of such doubting, but because of the lack of a sufficiently interesting alternative." (p. 152). The same is true of much of what Esenin-Vol'pin doubts.

There are some choice parenthetical remarks made at the expense of Marxism-Leninism: "It is not clear what we are to understand by 'dialectical determinism'. I think it is a child's rattle, invented to preserve the terminology of dogmatic Marxism where it is necessary to pay homage to science." (p. 141). "What shall we say about the obvious error of so-called historical materialism, which sees in economically originating relationships the basis for all others, particularly the basis for moral and juridical relationships? This is inapplicable, for example, to Soviet society, where a powerful state authority can change the economic system from an agrarian to an industrial one. How then can it remain 'the superstructure over the economic base?' The Marxists use sophisms, with the help of which they endeavor to conceal this paradox or, to state it better, this self-deception. These self-deceptions are well known. I shall merely say that, if they themselves believe in their theory, they will perish from their own blindness. I have the impression that they are not quite so stupid as to fail to understand this..." (pp. 160–162).

One has the feeling that it was for the sake of publishing such anti-Marxist-Leninist remarks that the philosophical treatise was included in *A Leaf of Spring* by the publisher. Yet it is by no means unusual to hear many such remarks from today's Soviet students, at least those in economics and the sciences, if not in philosophy. Both the publisher and at

least one reviewer of the book seem to be operating under the illusion that Esenin-Vol'pin's treatise is representative of "unofficial modern Russian philosophy" or "the silent Russian participation in professional (world-wide) philosophy". The former phrase seems to be the familiar corruption of the term 'philosophy' (as in: "What's your philosophy on it?") and is too vague to deal with here. As for Russian participation in professional philosophy as it is done in the rest of the world, it is neither silent nor represented by Esenin-Vol'pin's treatise. As the readers of *Studies in Soviet Thought* are well aware, this subject is too complex to even outline here, but Esenin-Vol'pin's treatise is obviously far from what we consider to be the creditable work which a few of the Russian philosophers are now doing. Since Esenin-Vol'pin's other publications fall into the last-named category, the treatise published in *A Leaf of Spring* is not even representative of his own serious philosophical work. His own prediction "I am not certain that I myself will be satisfied with what I have written" (p. 110) seems to have come true.

This reviewer found Esenin-Vol'pin to be capable of profound philosophical insight, something which is nowhere evident in his treatise. The publisher has done Western readers a service by giving us Esenin-Vol'pin's poems, but by including the treatise, he has done a singular disservice to Esenin-Vol'pin as a philosopher.

It is gratifying to report, however, that Esenin-Vol'pin is not "in prison somewhere in Russia" (publisher's introduction, p. 17), but living in Moscow. He has recently informed this reviewer that he is continuing his work on the ultraintuitionistic approach to the foundations of mathematics. It is to be hoped that the publication of "The Free Philosophical Treatise" will be relegated to the "museum of Russian stupidities" *(muzej russkoj gluposti)* as Esenin-Vol'pin requests, and that he will hereafter be left in peace by all concerned.

D. D. Comey

S. T. Meljuxin: *O dialektike razvitija neorganičeskoj prirody*. Moskva, Gospolizdat, 1960. 244str.

From a large number of specialised works on the philosophy of nature *On the Dialectic of the Development of Inorganic Nature* by S. T. Meljuxin

(of Leningrad; director of the philosophical section of the Electrotechnical Institute) stands out because it is an effort to provide an over-all representation of the process of nature in this domain and because it contains many statements on the world-process as a whole. Not a few of his theses treat problems which have up to now been rarely developed or discussed – even a Soviet reviewer complimented him for showing some originality. Especially striking is his effort to construct far-reaching and often daring hypotheses on the whole of nature from the fragmentary material of contemporary science. This makes his study of special philosophical relevance.

Meljuxin rather freely integrates his thoughts into the traditional systematic of the dialectical theory of development, i.e. with the three universal "laws of development", which Engels formulated, as the central point. One must show – according to the accepted version – which "specific forms" these laws take in inorganic nature. Already Engels had considered it important to seek in nature the "proof of the dialectic", i.e. of a conception originally drawn from social experience. Because many people have since then held the dialectic of nature to be problematic if not impossible, it is interesting to find another attempt at an elaboration of it, especially when it is question of a "test" not just in the sense of an ascertainment without risk but rather of a real test. As a matter of fact, Meljuxin's book contains some elements of just such a test.

In the first chapter ("The Essence of the Development of Inorganic Nature, pp. 7–80) there is an attempt at making precise the concept of development. Meljuxin understands it – in distinction to most other Soviet authors – as cyclical processes, complete and directed from within, which arise with the building of a system, which accomplish their "ascending course" in the proliferation of a multitude of forms and connections, and then pass into a declining phase which ends with the disintegration of the system or with its transition to a qualitatively different form of matter. (pp. 9–11). Meljuxin then describes the types of matter and the forms of movement which make up the stages of the developmental process of nature (pp. 19–34) and sketches the main steps of these processes which permeate matter from the most elementary forms known to us – possibly starting even with vacuums – through the formation of elementary particles, atomic nuclei, atoms and molecules to the construction of cosmic bodies and their systems. (pp. 39–80)

The object of the second chapter ("The Reciprocal Activity of the Oppositions in Development", pp. 81–115) is that structure-complex which for Lenin was the "core of the dialectic". Meljuxin first makes a contribution to the as yet incomplete explanation of the basic concepts, "opposition", "contradiction" and "conflict of opposites". Since one cannot speak of conflict in the strict sense in inorganic nature (p. 91), Meljuxin talks about a reciprocal activity *(vzaimodejstvie)* of opposites. He further notes that not all "opposites" are in such reciprocal activity; many are indifferent one to the other and imply no dynamic situation. He considers the term "contradiction" borrowed from logic as not too apt for ontology but since it has become traditional in Marxism, he uses it – objective contradictions are there where opposites are to be found in reciprocal activity. This conjuncture is – in the generally accepted version – the source *(istočnik)* of development of any kind. But, Meljuxin here contradicts the numerous authors who also hold contradiction to be the source of the self-movement of matter in general; this leads to a logical circle: since reciprocal activity (or 'conflict') presupposes movement, it cannot constitute movement. (p. 110) Rather the reciprocal activity of opposites is only the source of the *development* of every *concrete system.* (p. 111) A short reference makes it evident that Meljuxin holds Engels' formulation of the "law of the reciprocal inter-penetration of polar opposites" (and their "transformation one into the other when pushed to the extreme") for more appropriate than the Leninist "law of the unity and conflict of opposites" which reigns in Soviet philosophy. (p. 91) Most of Meljuxin's innovations will – as was indicated by P. A. Fedčenko's review (*FN* 1961, 1) – arouse the opposition of his Soviet colleagues. We, however, hold them to be more fruitful than the objections of the conservatives because they may prove to be serious *tests* of the dialectical formulae.

The main portion of the chapter (pp. 86–115) is a presentation of the forms of oppositions and contradictions which are present in inorganic nature and a discussion of how these structures will have importance as determinants of development. Specifically, he treats: the polarity of particle and anti-particle; continuity and discreteness; limitedness and infinity; stability and variability; qualitative determinacy and the disposition toward transition to another; attraction and repulsion; etc. Some of these opposites "characterize any movement" (constancy – changeability, limitedness – infinity, discreteness – continuity); some

"condition the complication of the forms of matter and movement in a development" (attraction – repulsion, absorption *(pogloščenie)* – radiation, association – disassociation); others "evoke the decline and disintegration of the system" (external influences which destroy the stability of a system; the formation of internal disproportions). (pp. 111–112) Meljuxin has, it is true, made clearer certain aspects of the complex of "real contradictions" than was done in the *"Osnovy" (Principles of Marxist Philosophy)* but it seems to us that much remains to be done in the direction of a full explanation.

The third chapter ("The Reciprocal Transition of Quantitative and Qualitative Changes in Development", pp. 116–143) begins like the others with a semantic discussion of the categories involved and gives the author a chance to make some basic constatations on the character of material objects and of matter in general. Noteworthy is, first of all, that – in accord with Lenin's thesis on the structural inexhaustibility of matter – he attributes to any body an indefinite series of "properties" *(svojstv)* a limited group of which, in each case, constitutes a quality *(kačestvo);* however the number of these qualities is, in turn, indefinite. Secondly, Meljuxin notes, in reference to matter as a whole, that "in it" each of its "concrete qualities" pre-exists in a "mode of possibility" *(v vide vozmožnosti)*. When matter takes on a determined form certain qualities come to the fore *(na pervyj plan)* while all the others are "only in potency" and "become real" then when the material object changes itself into something else. (p. 121) These are highly speculative and, nevertheless, very interesting theses.

The real law of the transition of quantitative into qualitative changes should – according to the general opinion of Diamaticians – make clear not only the origin of qualities but also the "causes of the eternal development of matter in the cosmos". (p. 127) The construction of the cosmic system is such that the decisive steps are always tied up with certain quantitative indices: there is a concentration of cosmic particle streams into diffuse clouds, the mass and density of which must reach a certain level to permit the autogenetic gravitational contraction; therewith begins a new quantitative series – the elevation of the temperature to many millions of degrees where a thermonuclear reaction, as a "qualitative leap", takes place. Then, the changes of nucleon count in the atomic cores leads to the establishment of the quality-scale of the chemical ele-

ments, and so on; all of this "thanks to the working of the law of transition of quantitative changes into qualitative". – However, it seems to us that one has attributed too much to the law, even abstracting from the fact that it is illegitimate to speak of the "working" of a law; certainly the "quantitative" and "qualitative" indices are greatly intertwined in the processes of nature and are in a definite relation one to the other, and this in a way so that quantitative series *either* have also a qualitative significance *or* prepare qualitative advances. The discovery of such correlations can hardly make us understand *why* matter develops itself into a rich scale of qualitatively different forms.

The fourth chapter ("The Reciprocal Relation Between the Cyclical Character and Irreversibility in Development", pp. 144–199) is built around a personal interpretation of the law of the "negation of negation" which has been widely discussed in recent Soviet literature. This law says that in a chain of transformations certain cases of "repetition" take place – in a triple or other rhythm. In nature, explains Meljuxin, this law is the "law of the reciprocal relation of the cyclic character and the progressivity in development". (p. 145) We present here only that which touches the process of the development of nature as a whole. Meljuxin begins with that "hierarchy" of the interwoven systems in which form the cosmic order reveals itself to us. But, for various reasons it proceeds into infinity neither in ascent nor in descent. The endless universe is not a system but an otherwise organised totality of systems. (p. 156) It does not undergo a development but only an irreversible change which is made up of the cyclical developments of the single systems. At the basis of progressive development there is a "tendency to complication *(uslożnenie)*" which is active in every material entity and which means for matter as a whole a "tendency to self-development" and to construction of ever higher types of systems and forms of movement. (pp. 151–152) One must assume that at every point in time there is in the endless universe an indefinite number of inhabited worlds *(obytaemye miry)* and that, in this sense, life is as eternal as matter itself. (p. 155)

Meljuxin devotes a special consideration to the "historical destiny" of the laws of nature only a few of which, in his opinion, are exempt from change; the majority come forward like the qualities of material entities from a sphere of the "potentially possible", undergo changes and then fall back into this sphere. (This version is not generally accepted in

current Soviet literature). (pp. 162–167) Meljuxin also includes in the discussion a consideration of the speculations on relativity and variability of time which have grown out of the theory of relativity. (pp. 167–184)

An extremely important part of the theory of development is the notion of the inexhaustibility and indestructibility of the ability for development inherent to matter. Against the thermodynamic doctrine on the entropy and final conflagration of the universe Meljuxin brings several arguments which present as possible a reversion of cooled masses and radiated particles as point of departure for a new cycle of system-building. One demonstrable source of possible regeneration is made up of the electromagnetic, gravitational and nuclear processes which are not subject to entropy. It can be hypothetically posited that the center of an immense conglomeration of cooled masses becomes explosive and that the charging of cosmic particle masses through radiated energizers can have as result the process of concentration and system building. (185–199)

The fourth and last chapter of the book ("The Causal Connections of Phenomena in Development", pp. 200–243) treats, in addition to the causal connection itself which is subjected to the usual differentiations (physical and non-physical, internal and external, essential and non-essential, accidental and necessary causality), a few related themes such as the relations between causality and functional connection and between dynamic and statistical regularity. Of special interest are Meljuxin's theses on a certain expansivity and productivity of the causally determined process of development: "In development there is not only the deployment or realisation of causal connections which were present in the previous states of a system but also the creation of completely new causal connections which were not in much earlier states but arise rather as tendencies of new states." (p. 202)

The development of this thesis takes the form of a dispute with classical (Laplacian) determinism. Meljuxin writes: "According to determinism, all in the world was already present in the form of possibility in the previous and extremely distant states." (p. 223) This not only has the unfortunate consequence that one is committed to fatalism but it is also mistaken in its premisses. If it were thus, continues Meljuxin in his *reductio ad absurdum,* then in the course of time the entirety of the possibilities available would have been exhausted and development would cease. Meljuxin also develops the argument in mathematical form, which,

nevertheless does not prevent the reviewer from holding it to be defective. He also embroils himself in a contradiction to his own thesis that matter as substance contains, in the mode of possibility, the totality of its qualities. (p. 121) This, to our mind, does not imply the end of the productivity of the real process. Meljuxin has something completely correct in view when he wants to show that something new comes to be at every step (p. 230), but he connects it – in our opinion – with a questionable view on the determinative characteristic of the world process. The basis for his error must be the fact that Diamat has up to now sufficiently investigated neither the individuality and the productivity of the causal relation nor the stratification of the modal problem (e.g. the difference between real and essential modality).

In spite of our critical remarks, which we hold to be necessary, it seems to us that Meljuxin's book is a thoughtful and original study and a useful basis for discussion in future work on the problems. Even the scientifically minded philosophers of the West should pay some attention to it.

Helmut Fleischer

CHRONOLOGY

(addenda 1960)

Note: addenda to the chronology will be frequent because the Soviets often wait five to seven months before reporting events and meetings.

July	conference in Moscow on "Socialist Government and Socialist Democracy"; participants from IF and Institute of Government and Law of the AN SSSR. (*VF* 1961, 6, 154–161)
9–16 Aug.	25th international congress of orientalists with participation of philosophers (*FN* 1961, 3, 186–188)
18–20 Oct.	conference of philosophy instructors of the Ukraine in Xar'xov "On the Development of the Superstructure of Soviet Society in the Period of Large-Scale Construction of Communism"; 400 participants (*FN* 1961, 2, 171–173)
1–3 Dec.	meeting of teachers and students of philosophy, physics and chemistry of the MGU on philosophical questions of physics (*FN* 1961, 3, 192–193)
6 Dec.	meeting of philosophy faculty of MGU in honor of Engels' 140th birthday (*FN* 1961, 3, 51)
end of 1960	meeting in Kiev on philosophical questions of biology; participants from biology section of AN SSSR and from IF (*VF* 1961, 5, 155–158)

1961

January	theoretical conferences in Leningrad, Novosibirsk, Odessa, Xar'kov, Saratov and Čardžo on questions of Communist education (*VF* 1961, 5, 144–150)
6 Jan.	Khrushchov tells the AON and Institute of Marxism–Leninism of the CC about the meeting of the 81 Communist and workers' parties (*Pravda* 7 Jan. 1961)
9 Jan.	*(Pravda)* "The Essence of Ideological Work"
10–13 Jan.	conference at the University of Kiev on "Dialectical and Historical Materialism – Philosophical Basis of Contemporary Science". (*FN* 1961, 3, 189–191)
10–18 Jan.	Plenum of CC (*Pravda* 11–19 Jan. 1961)

24–28 Jan. 7th session of the All-Union Paleontology Society, in Leningrad with philosophical (methodological) discussions on this science (*VF* 1961, 7, 156–159)

26–28 Jan. conference in Novosibirsk on Communist education of workers under large-scale construction of Communism; participation of members of Siberian section of AN and of IF (*FN* 1961, 3, 178–183)

1–5 Feb. conference at MGU on "Dialectical Materialism and Contemporary Positivism"; over 500 participants (*VF* 1961, 9, 125–132; 12, 45. *FN* 1961, 2, 132; 4, 203–207. *Vestnik MGU* 1961, 3, 79–85. s. also *VF* 1961, 6, 47.)

8–9 Feb. general meeting of Soviet Sociological Association in the IF to prepare Soviet participation in the 5th international sociological congress (Washington, September 1962) (*VF* 1961, 5, 150–154)

11 Feb. Khrushchov's speech at Voronež on "Using the Progressive Experience and Successes of Science, to Raise the Level of Agriculture" (*Pravda* 19 February 1961)

13–15 Feb. all-union, inter-collegial conference in Sverdlovsk on "The Cultural and Professional Level of the Workers in the Period of Large-Scale Communist Construction" (*VF* 1961, 8, 153–156; *FN* 1961, 3, 18; 4, 194–196)

14 Feb. conference of IF on philosophical questions of science (*VF* 1961, 7, 159–160)

17 Feb. MGU philosophical session in honor of Francis Bacon's 400th birthday (*Vestnik MGU* 1961, 3, 87–90)

spring joint session of philosophical (methodological) seminars: conference on the cooperation of the sciences in the study of the earth (*VF* 1961, 12, 122–130)

March all-union coordination conference in IF on questions of philosophy (*VF* 1961, 7, 145–151)

10 March first session of the AN SSSR's Central Bureau of Philosophical (methodological) Seminars (*VF* 1961, 6, 152–153)

21–31 March all-Russian conference at MGU on philosophical problems of science; 600 participants (*FN* 1961, 4, 200–202)

27 March	joint session of Section for Physico-Mathematical Sciences and the Teachers' Soviet of the Physics Institute in honor of the 70th birthday of S. I. Vavilov (s. *VF* 1961, 7, 73–87)
end of March	conference of the philosophy faculty of MGU on the November 1960 declaration of the 81 parties (*VF* 1961, 9, 122–124)
7 April	visit of At. Žoža, president of the Rumanian Academy of Science, to the philosophy faculty of MGU (*Vestnik MGU* 1961, 4, 92–94)
12 April	*(Pravda)* "On Measures for the Amelioration of Coordination of Scientific Work in the Country and the Activity of the AN SSSR".
21 April	*(Pravda)* "Land of Progressive Science" on the improvement of the AN SSSR
May	visit of Niels Bohr to SU. He addressed the Physics Institute and the professors and students of the physics faculty of MGU (*VF* 1961, 8, 156–160)
17–18 May	conference on "Tasks, Methods and Experiences of Concrete Sociological Investigations" in the philosophic section of the Institute for the Amelioration of the Qualifications of Teachers of Social Sciences of the MGU (*VF* 1961, 8, 183. *FN* 1961, 4, 196–200)
summer	visit of Japanese Marxist–Leninists to IF (*VF* 1961, 12, 135–137)
June	conference at the Institute for the Amelioration of the Qualifications of Teachers of Social Sciences of the MGU on philosophical problems of scientific Communism (*FN* 1961, 3, 143–146)
12–14 June	all-union conference of scientific workers; in the Kremlin (*VF* 1961, 7, 3. *Pravda* 13–17 June 1961)
4–7 July	all-union meeting of workers of Upper Schools on the preparation of specialists in line with the program of the 22nd party congress (*FN* 1961, 4, 188–193. *Pravda* 5–8 July 1961)
23 July	*(Pravda)* "Science and Production"
30 July	*(Pravda)* project of new party program

5 Aug.	*(Pravda)* project of statutes of CPSU
24 Sept.	*(Pravda)* "The Moral Code of the Builder of Communism"
14 Oct.	Plenum of CC (*Pravda* 15 October 1961)
17–31 Oct.	22nd Congress of CPSU (*Pravda* 18 Oct.–1 Nov. 1961)
2 Nov.	*(Pravda)* new program of CPSU
3 Nov.	*(Pravda)* statutes of CPSU
6–8 Dec.	all-union symposium on cybernetics in Tiflis (*VF* 1962, 3, 79)
25–28 Dec.	all-union conference of ideological workers on "The 22nd Party Congress and the Tasks of Ideological Work" (*VF* 1962, 1, 4. *Pravda* 26–29 Dec. 1961)

KARL G. BALLESTREM

BIBLIOGRAPHY

OF RECENT WESTERN WORKS ON SOVIET PHILOSOPHY

This bibliography claims in no way to be complete. We tried to include the most important books on the matter and some significant articles. Restriction had to be made to works since 1945. Only writings dealing with Soviet philosophy in the strict sense (i.e. not on Marxism in general, philosophy in Poland, etc.) were considered.

Achminov, H.: "Theoretical Problems of Communism and the Twenty-First Party Congress". In: *Bulletin.* Institute for the Study of the USSR, 1959, 3, 3–12.

Acton, H. B.: *The Illusion of the Epoch.* London 1955.

Ahlberg, R.: *"Dialektische Philosophie" und Gesellschaft in der Sowjetunion.* Berlin 1960.

Andreas, T.: *Zur Widerlegung des dialektischen und historischen Materialismus.* Pfaffenhofen-Ilm 1954.

Bauer, R. A.: *The New Man in Soviet Psychology.* Cambridge 1952 (Germ.: Bad Nauheim 1955).

Blakeley, T.: *Soviet Scholasticism.* [Sovietica], Dordrecht 1961.

Bibliographie der sowjetischen Philosophie. 1. Die *Voprosy Filosofii* 1947–1956. 2. Bücher 1947–1956. Bücher und Aufsätze 1957–1958. [Sovietica], Dordrecht 1959.

Bochenski, J. M.: *Die kommunistische Ideologie und die Würde, Freiheit und Gleichheit der Menschen im Sinne des Grundgesetzes für die Bundesrepublik Deutschland vom 23.5.1949.* Bonn 1956.

Bochenski, J. M.: *Die dogmatischen Grundlagen der sowjetischen Philosophie.* [Sovietica], Dordrecht 1959.

Bochenski, J. M.: "Einführung in die sowjetische Philosophie der Gegenwart". In: *Aus Politik und Zeitgeschichte,* Beilage zur Wochenzeitung *Das Parlament,* 1959, 45, 593–618.

Bochenski, J. M.: *Der sowjetrussiche dialektische Materialismus* (Diamat). 3rd ed. Bern 1960.

Bochenski, J. M.: "Philosophy Studies. Subject, Object, and Organisation". In: *Soviet Survey,* Jan.-March 1960, 64–74.

Bochenski, J. M.–Blakeley, T. (eds.): *Studies in Soviet Thought* I. [Sovietica], Dordrecht 1961.

Bochenski, J. M.–Niemeyer, G. (eds.): *Handbuch des Weltkommunismus.* Freiburg–München 1958.

Buchholz, A.: *Ideologie und Forschung in der sowjetischen Naturwissenschaft.* Stuttgart 1953.

Buchholz, A.: "Über das Entwicklungstempo der Sowjetwissenschaft". In: *Osteuropa-Naturwissenschaft,* 1959, 2, 93–104.

Buchholz, A.: *Der Kampf um die bessere Welt.* Ansätze zum Durchdenken der geistigen Ost-West-Probleme. Stuttgart 1961.

Chambre, H.: *De Karl Marx à Mao Tsé-Tung.* Paris 1959.

The Communist Ideology. US Committee on Un-American Activities. Washington 1959.

Dahm, H.: "Innere Widersprüche der Diamat-Soziologie". In: *Ost-Probleme,* 1956, 16, 554–565.

Dahm, H.: "Der Streit um die Materie des Diamat". In: *Ost-Probleme,* 1956, 27, 912–925.

Dahm, H.: "Ist die sowjetrussiche Dialektik latenter Existentialismus?" In: *Ost-Probleme,* 1956, 43, 1486–1500.

Dahm, H.: "Ontologische Aspekte der sowjetischen Dialektik". In: *Osteuropa,* 1957, 4, 233–244.

Dahm, H.: "Renaissance der formalen Logik". In: *Ost-Probleme,* 1957, 8, 254–267.

Dahm, H.: "Die Sowjetphilosophie in der katholischen Kritik und in Selbstdarstellungen". In: *Die Welt der Bücher,* 1958, 10, 526–539.

Delimars, E.: "Le retour de Lyssenko". In: *Le Contrat Social,* 1960, 2, 83–88.

Edgerton, W.: *A Soviet History of Philosophy.* Washington 1950.

Ehlen, P.: *Der Atheismus im dialektischen Materialismus.* München 1961.

Falk, H.: *Die Weltanschauung des Bolschewismus.* Würzburg 1951.

Falk, H.: *Die ideologischen Grundlagen des Kommunismus.* München 1961.

Fetscher, I.: "Die Enstehung des dialektischen Materialismus als metaphysischer Weltanschauung". In: *Zeitschrift für Theologie und Kirche,* 1953, 185–207.

Fetscher, I.: *Stalin. Über dialektischen und historischen Materialismus.*

Vollständiger Text und kritischer Kommentar. Frankfurt a.M. 1956.
Fetscher, I.: *Von Marx zur Sowjetideologie.* Frankfurt a.M. 1959.
Fetscher, I.: *Die Freiheit im Lichte des Marxismus-Leninismus.* Bonn 1959.
La filosofia del comunismo. Acta Pont. Acad. S. Thomae, Torino 1949.
Goerdt, W.: *Fragen der Philosophie.* Ein Materialbeitrag zur Erforschung der Sowjetphilosophie im Spiegel der Zeitschrift *Voprosy Filosofii* 1947–1956. Köln–Opladen 1960.
Gregoire, F.: *La pensée communiste.* 3 vols. Louvain 1953.
Hazard, J. N.: *Soviet Legal Philosophy.* Cambridge, Mass. 1957.
Hommes, J.: *Der technische Eros.* Das Wesen der materialistischen Geschichtsauffassung. Freiburg 1955.
Hook, S.: *Reason, Social Myths and Democracy.* New York 1950.
Hunt, R. N. C.: *The Theory and Practice of Communism.* London 1951.
Hunt, R. N. C.: *Marxism Past and Present.* New York 1954.
Hürlimann, O.: *Ideologie und Methode des Kommunismus.* Zürich 1951.
Joravsky, D.: *Soviet Marxism and Natural Science (1917–1932).* London 1961.
Karisch, R.: *Christ und Diamat.* 3rd ed. Berlin 1958.
Kline, G. L.: *Spinoza in Soviet Philosophy.* A series of essays selected and translated and with an introduction. New York–London 1952.
Kline, G. L.: "A Philosophical Critique of Soviet Marxism". In: *The Review of Metaphysics,* September 1955, 90–105.
Kline, G. L.: "Recent Soviet Philosophy". In: *The Annals of the American Acad. of Political and Social Science,* January 1956, 126–138.
Kline, G. L.: "Fundamentals of Marxist Philosophy". In: *Soviet Survey,* Oct.–Dec. 1959, 58–62.
Kline, G. L.: "Philosophy and Practice". In: *Survey,* Oct. 1961, 63–71.
Kline, G. L.: "Spinoza East and West. Six Recent Studies in Spinozist Philosophy". In: *The Journal of Philosophy,* 1961, 13, 346–355.
Kline, G. L.: [Reviews] In: *The Journal of Symbolic Logic,* Jan. 1950, 243f.; March 1951, 46–48; June 1952, 124–129; March 1953, 83–86; Sept. 1953, 271f.; June 1954, 149.
Kline, G. L.: [Review of G. A. Wetter: *Dialectical Materialism,* London 1958] In: *Soviet Studies,* 1959, 1, 61–69.
Kluščeckij, A. V.: *Die marxistisch-sowjetische Konzeption des Menschen im Lichte der westlichen Philosophie.* München 1956.

Köhler, H.: *Das Menschenbild des dialektischen Materialismus.* München 1957.

Köhler, H.: *Gründe des dialektischen Materialismus im europäischen Denken.* München 1961.

Lange, G.: *Marxismus Leninismus Stalinismus.* Zur Kritik des dialektischen Materialismus. Stuttgart 1955.

Lefèbvre, H.: *Le matérialisme dialectique.* Paris 1949.

Lehmbruch, G.: *Kleiner Wegweiser zum Studium der Sowjetideologie.* Bonn 1958.

Lieber, H. J.: *Die Philosophie des Bolschewismus in den Grundzügen ihrer Entwicklung.* Frankfurt–Berlin–Bonn 1958.

Lobkowicz, N.: *Das Widerspruchsprinzip in der sowjetischen Philosophie der Gegenwart.* [Sovietica], Dordrecht 1960.

Maceina, A.: "Das Metaphysische und das Politische im sowjetischen Atheismus". In: *Tagungsberichte aus dem J. G. Herder-Institut,* Nr. 1, Marburg 1959, 1–24.

Marcuse, H.: *Soviet Marxism.* A Critical Analysis. New York 1958.

Marxismusstudien. Schriften der Evangelischen Studiengemeinschaft. Vol. 1.–III. Tübingen 1954, 1957, 1960.

Materialismo storico. Atti del Congresso Internazionale di Filosofia (1946). Roma 1947.

Mehnert, K.: *Weltrevolution durch Weltgeschichte.* Die Geschichtslehre des Stalinismus. Stuttgart 1954.

Merleau-Ponty, M.: *Les aventures de la dialectique.* Paris 1955.

Meyer, A.: *Leninism.* Cambridge, Mass. 1957.

Möbus, G.: *Behauptung ohne Beweis.* Osnabrück 1961.

Monnerot, J.: *Sociologie du communisme.* Paris 1949 (Germ. 1952; Engl. 1953).

Müller–Christian, S.: "Die physikalischen Thesen des Diamat". In: *Ost-Probleme,* 1957, 31, 1086–1099.

Müller–Markus, S.: "Physikalischer Materiebegriff und dialektischer Materialismus". In: *Osteuropa Naturwissenschaft,* 1958, 2, 114–122.

Müller–Markus, S.: "Der Prozess Einstein". In: *Wort und Wahrheit,* 1959, 12, 755–770.

Müller–Markus, S.: *Einstein in der Sowjetphilosophie. Krisis einer Lehre. I.* [Sovietica], Dordrecht 1960.

Müller–Markus, S.: "Das naturwissenschaftliche Weltbild der Sowjet-

union". In: *Russland – gestern und heute,* Bonn 1960, 67–90.
Müller-Markus, S.: "Zur Diskussion der Relativitätstheorie in der Sowjetwissenschaft". In: *Philosophia Naturalis,* 1961, 3, 327–348.
Ogiermann, H.: *Materialistische Dialektik.* München 1958.
Olgin, C.: "Lenin's Philosophical Legacy: The Reconstruction of Dialectical Materialism". In: *Bulletin.* Institute for the Study of the USSR, 1959, 1, 3–15.
Patri, A.: "La Scolastique Marxiste-Léniniste". In: *Le Contrat Social,* 1961, 5, 279–285.
Perucatti, A.: *Saggio di critica scientifica sul materialismo dialettico.* Napoli n.d.
Philipov, A.: *The Concise Philosophical Dictionnary. A critical review.* New York (Res. Progr. on the USSR) n.d.
Philipov, A.: *Logic and Dialectic in the Soviet Union.* New York 1952.
The Philosophy of Communism. With an introduction by Boyer. New York 1952.
Pirozhkova, V.: "Problems of Historical Materialism". In: *Bulletin.* Institute for the Study of the USSR, 1958, 10, 31–37.
Pirozhkova, V.: "Freedom and Determinism in Historical Materialism". In: *Bulletin.* Institute for the Study of the USSR, 1959, 7, 53–58.
Plamenatz, J.: *German Marxism and Russian Communism.* London–New York–Toronto 1954.
Ruszkowski, A.: *El comunismo.* Barcelona 1962.
Simon, B. (ed.): *Psychology in the Soviet Union.* Stanford UP 1957.
Spirito, U.: *La filosofia del comunismo.* Firenze 1948.
Stepun, F.: *Der Bolschewismus und die christliche Existenz.* München 1959.
Vagovič, S.: *Etica comunista.* Roma 1959.
de Vries, J.: *Die Erkenntnistheorie des dialektischen Materialismus.* München 1958.
von Weiss, A.: "Logischer Positivismus und Kybernetik im Blickfeld der bolschewistischen Kritik". In: *Freiburger Zeitschrift für Philosophie und Theologie,* 1955, 4, 273–295.
von Weiss, A.: "Fundamente und Wirksamkeit der bolschewistischen Ideologie". In: *Osteuropa,* 1958, 3, 165–178.
Wenzl, A.: *Der Begriff der Materie und das Problem des Materialismus.* Sitzungsberichte der Bayrischen Akademie der Wissenschaften, Phil.-hist. Klasse, 1958, 3.

Wetter, G. A.: *Il materialismo dialettico sovietico.* Roma 1948.

Wetter, G. A.: *Der dialektische Materialismus.* 4th ed. Wien 1958 (Engl.: London 1958).

Wetter, G. A.: *Philosophie und Naturwissenschaft in der Sowjetunion.* Hamburg 1958.

Wetter, G. A.: *Der dialektische Materialismus und das Problem der Entstehung des Lebens. Zur Theorie von A. I. Oparin.* München–Salzburg–Köln 1958.

Wetter, G. A.: *Die sowjetische Konzeption der Koexistenz.* Bonn 1959 (Engl. in: *Soviet Survey,* Oct.–Dec. 1959, 19–34.)

Witt–Hansen, J.: *Historical Materialism. The Method, the Theories, Exposition and Critique.* Book one: *The Method.* Copenhagen 1960.

REPORT FROM THE INSTITUTE

Appointments. T. J. Blakeley, Ph. D., as first assistant of the Institute. Mr. Walther Vogel as Secretary General of the Institute. L. Hackstaff, Ph. D., as assistant of the Institute. G. Küng, Ph. D., as instructor of philosophy at the University of Notre Dame, USA.

Conferences and study trips. Prof. Bocheński participated in a conference sponsored by the Foundation for Foreign Affairs Inc. and the Herder Institute of Marburg a.d. Lahn, which took place in Chicago, 22 to 25 March of this year.
Eight members of the Institute, lead by the director, took part in the Sovietological conference, sponsored by the Rockefeller Foundation and held in the Osteuropa-Institut an der Freien Universität Berlin on April 2 and 3 of this year. (see the first article in this issue)
During the first week in March, David D. Comey visited a number of Sovietological centers in the United States and Great Britain, discussing current research on Soviet ideology, philosophy and science with the directors of the Russian and East European Institute at Indiana University, the Russian Research Center at Harvard, the Research Institute on Communist Affairs at Columbia, and St. Anthony's College (Oxford). He also met with Prof. A. J. Ayer to discuss the latter's forthcoming lecture tour of the Soviet Union in late March.
Three members of the Institute (Karl Ballestrem, Thomas Blakeley and Wolfhart Boeselager) consulted with French researchers on Soviet affairs during a trip to Paris in the first week of March of this year.

Visitors. Prof. K. H. Ruffman, *Privatdozent* at the University of Cologne and director of studies of the *Ost-Kolleg* (Cologne);
Dr. Arnold Buchholz, editor of *Osteuropa-Naturwissenschaft,* who made a report on his recent research;
Prof. George L. Kline (Bryn Mawr), who read a paper on revisionism.

Publications. Prof. Lobkowicz' *Marxismus-Leninismus in der ČSR* is now available.

STUDIES IN SOVIET THOUGHT

A QUARTERLY OF THE INSTITUTE OF EAST-EUROPEAN STUDIES

AT THE UNIVERSITY OF FRIBOURG / SWITZERLAND

VOLUME II No. 3 SEPTEMBER 1962

H. Fleischer Die Idee der historischen Notwendigkeit im historischen Materialismus

D. D. Comey A Positivist among the Dialecticians

Notes and Comments
Ideology and Philosophy – Philosophy of Science – Ethics – Esthetics – Scientific Atheism – Hungarian Philosophy – General – Errata

Reviews
I. D. Pancxava (ed.): Osnovnye Voprosy Naučnogo Ateizma (T. J. Blakeley)
Osnovy Naučnogo Ateizma (T. J. Blakeley)
Georg Lukács: Schriften zur Literatursoziologie (Jürgen Rühle)
Neil O'Connor (ed.): Recent Soviet Psychology (D. D. Comey)

Chronology
1961 (addenda)
1962

Bibliography
Philosophical Articles in *Uspexi Fizičeskix Nauk,* 1918–1962 (S. Müller-Markus)

Report from the Institute

A Note to Western Authors

This content downloaded from 131.172.36.29 on Wed, 03 Aug 2016 05:13:22 UTC
All use subject to http://about.jstor.org/terms

ABBREVIATIONS

AN	Akademija nauk (of SSSR unless otherwise specified)
AON	Akademija obščestvennyx nauk pri CK KPSS
CK KPSS	Central'nyj komitet kommunističeskoj partii sovetskogo sojuza
FN	Naučnye doklady vysšej školy. Filosofskie nauki
IF	Institut filosofii AN
IIL	Izdatel'stvo inostrannoj literatury
LGU	Leningradskij gosudarstvennyj universitet
MGU	Moskovskij gosudarstvennyj universitet
SSSR	Sojuz sovetskix socialističeskix respublik
VF	Voprosy filosofii
VPŠ	Vyššaja partijnaja škola
VUZ	Vyššoe učebnoe zavedenie (and its plural)

TRANSLITERATION SYSTEM

Russian Letter *Cap. Ital.*	Studies in Soviet Thought	U.S. Library of Congress	Russian Letter *Cap. Ital.*	Studies in Soviet Thought	U.S. Library of Congress
А *а*	a	a	Р *р*	r	r
Б *б*	b	b	С *с*	s	s
В *в*	v	v	Т *т*	t	t
Г *г*	g	g	У *у*	u	u
Д *д*	d	d	Ф *ф*	f	f
Е *е*	e	e	Х *х*	x	x͡kh
Ё *ё*	ë	ë	Ц *ц*	c	t͡s
Ж *ж*	ž	ž͡h	Ч *ч*	č	č͡h
З *з*	z	z	Ш *ш*	š	š͡h
И *и*	i	i	Щ *щ*	šč	š͡hch
Й *й*	j	ĭ	Ъ *ъ*	″	″
К *к*	k	k	Ы *ы*	y	y
Л *л*	l	l	Ь *ь*	′	′
М *м*	m	m	Э *э*	é	é
Н *н*	n	n	Ю *ю*	ju	i͡u
О *о*	o	o	Я *я*	ja	i͡a
П *п*	p	p			

Note: Articles in German will use 'ch' in place of 'x'. Commonly used proper names retain the form which is ordinary in English or German – e.g. Trotsky, Khrushchov, etc.

This content downloaded from 131.172.36.29 on Wed, 03 Aug 2016 05:13:22 UTC
All use subject to http://about.jstor.org/terms

HELMUT FLEISCHER

DIE IDEE DER HISTORISCHEN NOTWENDIGKEIT IM HISTORISCHEN MATERIALISMUS

Nur wenige der philosophischen Positionen des Marxismus-Leninismus spielen bei der theoretischen Begründung der kommunistischen Politik und bei der geistigen Formung ihrer Parteigänger eine so wichtige Rolle wie die Idee von den *Gesetzen,* nach denen die Entwicklung der menschlichen Gesellschaft in der Art eines 'naturgeschichtlichen Prozesses' *notwendig* abläuft. Die Propagandisten haben hierüber schon sehr viel und manchmal sehr Befremdliches [1] gesagt und geschrieben; seit einigen Jahren hat sich auch die ernsthafte theoretische Reflexion intensiver dem Problem der Gesetzlichkeit in der Welt zugewandt und eine Reihe monographischer Arbeiten hervorgebracht. Ein wichtiger Teil der Erörterungen bewegt sich im Felde des *dialektischen* Materialismus, wo es um die Fixierung des allgemeinen kategorialen Gerüsts einer dialektisch-materialistischen Determinationslehre geht. In mehreren Abhandlungen über Kausalität, Gesetz, Zweckmäßigkeit, Möglichkeit, Notwendigkeit, Wahrscheinlichkeit und Zufall sind die Konturen des 'dialektisch-materialistischen Determinismus' im großen und ganzen, wenn auch noch nicht in allem klar erkennbar geworden.[2]

Die Zahl der speziellen Untersuchungen über den *historischen* Determinismus der marxistisch-leninistischen Philosophie ist geringer und in ihrer Problemstellung und Aussage weniger differenziert. Wir wollen mit den folgenden Betrachtungen in der hier gebotenen Kürze den heutigen Stand sowie die Mängel und Lücken der sowjetischen Analysen zum historischen Determinationsproblem beschreiben und einige Vorschläge für eine weiterführende Interpretation zur Diskussion stellen.

ALLGEMEIN-ONTOLOGISCHE PRÄMISSEN

Sowohl in ihren universellen, die 'Welt im ganzen' betreffenden, als auch in den spezielleren Erklärungen über die Determination des historischen Geschehens betonen alle sowjetischen Texte zunächst stets das Grundprinzip jedes Determinismus – die 'Herrschaft der Notwendigkeit', die

Studies in Soviet Thought II, 3 (September 1962) © *D. Reidel, Dordrecht–Holland.*

auf dem 'Wirken objektiver Gesetze' beruht.[3] Im weiteren Gang der Darlegung erweist sich jedoch, daß die Notwendigkeit ihren Widerpart hat: es gibt eine 'objektive Zufälligkeit', die in der Welt selbst ihren Ort hat und nicht etwa bloß in menschlichem Nichtwissen um die Bestimmungsgründe einer Sache wurzelt. Damit setzt sich der dialektisch-materialistische Determinismus sehr entschieden gegen den sogenannten 'mechanischen Determinismus' früherer Materialisten ab; während diese rundweg alles in der Welt als notwendig ansahen und, wie man meint, damit dem Fatalismus verfielen, lehnen die sowjetischen Philosophen aus verschiedenen Erwägungen den Gedanken einer vollständigen und eindeutigen Vorbestimmtheit des Späteren und des Künftigen auf Grund der früheren Prozeßstadien ab.

Die generell proklamierte 'Herrschaft der Notwendigkeit' lockert sich namentlich dadurch auf, daß man das Notwendig- und Zufälligsein als etwas Relatives auffaßt: nur im Hinblick auf einzelne konkrete Komplexe von Bedingungen und Systeme von Beziehungen ist es überhaupt möglich, irgendeine Erscheinung als notwendig oder zufällig zu diagnostizieren. Die Gesamtwirklichkeit stellt sich als eine Vielzahl determinativer Instanzen dar, die ihre Eigengesetzlichkeit und eine gewisse ('relative') Unabhängigkeit voneinander haben. Jede von ihnen bildet gewissermaßen ein 'determinatives Bezugssystem', innerhalb dessen (auf Grund der in ihm geltenden Gesetze) bestimmte Phänomene notwendig sind. Doch diese Determination im Modus der Notwendigkeit ist keine vollständige, durchgängige: erstens ist die Gesetzesdetermination *ex definitione* eine bloß allgemeine, d.h. unter ihr sind gewisse generelle oder typische Phänomene notwendig, während die besondere und individuelle Ausprägung der Gebilde und Ereignisse 'zufällig' (im Sinne von *akzidentell*) ist; zweitens kommt es dadurch, daß die autonom determinierten Bewegungsimpulse ('Tendenzen') verschiedener Systeme miteinander interferieren, in jedem von ihnen auch zu heteronomen, systemfremden Effekten, die in einem anderen Sinne (nämlich im Sinne des *Kontingenten*) 'zufällig' sind.

Zur 'Auflockerung' der Vorstellungen vom determinativen Zusammenhang trägt ferner auch die Einsicht in den 'statistischen' und Wahrscheinlichkeits-Charakter vieler Gesetzesbeziehungen bei.

Die dialektisch-materialistische Determinationslehre statuiert also einen *determinativen Pluralismus,* für den die 'Notwendigkeiten' (die wesens-

notwendigen Effekte konkreter Systeme) verschiedener Rang- und Größenordnung bei aller wechselseitigen Durchdringung doch auch genügend selbständig gegeneinander sind. Im Beziehungsgefüge der Welt gibt es zahllose Fälle *spezieller Indetermination.* Der explizit verfochtene Determinismus der marxistisch-leninistischen Philosophie ist nicht so sehr ein kompakter und totaler Kausaldeterminismus, als vielmehr ein diskreter und auf partielle Instanzen bezogener Gesetzesdeterminismus. (Hier ist allerdings kritisch zu vermerken, daß die maßgeblichen sowjetischen Autoren nicht ganz konsequent verfahren, wenn sie geneigt sind, das Problem einer Integration der zahllosen *Teil*determinationen zu einer für jedes Phänomen und für das Ganze totalen *Gesamt*determination zu umgehen. Dem wollen wir jetzt aber nicht weiter nachgehen, obgleich es auch für die Sozialtheorie überaus gewichtige Konsequenzen hat.)

THESEN ÜBER DIE DETERMINATION DES SOZIALEN GESCHEHENS

"Die Entwicklung der Gesellschaft", heißt es in den Lehrtexten, "ist ein gesetzmäßiger Prozeß, der einer bestimmten, nicht vom Willen und Bewußtsein der Menschen abhängigen Notwendigkeit unterworfen ist." [4] Die Aufschlüsselung und Präzisierung dieses Grundgedankens kann man in folgenden Thesen [5] sehen:

(a) Nicht die Gesetze, sondern die Menschen machen die Geschichte, nur eben nicht nach freiem Belieben; zwar bestimmen Gesetze den Gang der Geschichte, aber sie vermögen dies nur 'mittels' *(čerez)* zielstrebiger Aktionen der Menschen.

(b) Die Gesetze selbst "bilden sich im Ergebnis der Tätigkeit der Menschen" und bestimmen dann ihrerseits deren Richtung.

(c) Die Gesetze bestimmen den Gang der Geschichte nicht in allen Details, sondern nur in seiner 'allgemeinen Richtung'. Das soziale Gesetz "wirkt in Form der herrschenden Entwicklungstendenz gegebener gesellschaftlicher Verhältnisse"; die Entwicklung "hängt nicht nur von den allgemeinen Gesetzen ab, sondern auch vom faktischen Kräfteverhältnis, von der Politik der kämpfenden Klassen und von vielen anderen spezifischen Bedingungen".

(d) Da sich die historische Gesetzmäßigkeit in der aktiven Tätigkeit der Menschen manifestiert *(projavljaetsja),* haben auch soziale Ideen, von denen sich die Menschen leiten lassen, eine gewaltige Bedeutung.

(e) Wenigstens ein Teil der Gesetze 'bestimmt' das Handeln der Menschen in einer mehr indirekten, durch Einsichten und Entschlüsse vermittelten Weise; zu ihnen haben die Menschen eine gewisse Distanz: die Gesetze erheben 'Forderungen' *(trebovanija)*, welche die Menschen erfüllen oder mißachten können (dafür müssen sie allerdings büßen).[6]
(f) Es gibt jedoch auch Fälle, in denen die Menschen den sozialen Gesetzen ganz und gar nicht souvrän gegenüberstehen. In den vorsozialistischen Gesellschaftsformationen "wirkten die Gesetze elementar, als eine blinde Notwendigkeit": "Die Gesetze herrschten über die Menschen, wurden von ihnen als eine fremde und unbegreifliche Macht empfunden, der sie sich unterwerfen mußten".
(g) Im Sozialismus hören die Menschen aber auf, die 'Sklaven der Gesetze' zu sein; diese Gesellschaftsordnung ermöglicht es ihnen, erkannte Gesetze 'auszunützen' *(ispol'zovat')*, d.h. je nach der Sachlage zu regulieren, zu lenken oder zu beherrschen; sie können die Wirkungen der Gesetze voraussehen und sich rechtzeitig darauf vorbereiten.
(h) Die Kenntnis der objektiven Gesetze macht es möglich, das "Endziel der Bewegung" klar zu sehen, "wie es sich aus dem gesamten Gang der gesellschaftlichen Entwicklung abzeichnet".
(i) Im Sozialismus besteht die Gewähr, daß die "objektive Entwicklungslinie der Gesellschaft" mit den "Interessen, Bestrebungen und Wünschen der Mehrzahl der Gesellschaftsglieder zusammenfällt *(sovpadaet)*"; das steigert ihre schöpferische Energie und beschleunigt die Entwicklung der Gesellschaft.
Mit größtem Nachdruck bestreiten die sowjetischen Philosophen, daß ihre Auffassung von der Gesetzmäßigkeit und Notwendigkeit der gesellschaftlichen Entwicklung zu fatalistischen oder gar quietistischen Konsequenzen führe. "Hindern die objektiven Gesetze der Physik, der Chemie, der Biologie die Menschen daran, sich die Naturkräfte zu unterwerfen? Natürlich nicht. ... So ist auch das Bestehen objektiver Entwicklungsgesetze der Gesellschaft und ihre Erkenntnis die Bedingung für die Möglichkeit einer erfolgreichen bewußten geschichtlichen Tätigkeit der Menschen."[7] Wenn dennoch verschiedene Kritiker dem Marxismus-Leninismus eine fatalistische Anschauung zugeschrieben haben, so dürfte das nicht nur durch manche unbedachten Äußerungen sowjetischer Autoren (vgl. Anm. 1) begünstigt sein, sondern auch durch die mangelhafte analytische Präzision und Differenzierung, in der die maßgeblichen

Lehrtexte und auch monographische Arbeiten das Problem der historischen Determination abhandeln. In dieser Hinsicht zeigen die naturphilosophischen Untersuchungen, wie uns scheint, ein vorteilhafteres Bild als die sozialphilosophischen.

DER KODEX DER SOZIALEN GESETZE

Wie aus allen Texten zu ersehen ist, bilden die Gesetze der menschlichen Gesellschaft ein weitläufiges und vielfach gestuftes, 'hierarchisches' System von Korrelationen, die entweder für das Ganze oder für einzelne Teilbereiche, für das determinative Zentrum oder für die Peripherie, für den Gesamtprozeß oder für seine einzelnen Etappen gültig sind. Je nach der Rangstufe oder dem Umfang der 'Sphäre ihres Wirkens' pflegt man die *allgemeinen* von den *spezifischen,* die *grundlegenden* von den *nichtgrundlegenden* Gesetzen zu unterscheiden.[8]

Als allgemeine, für alle Gesellschaftszustände charakteristische Gesetze hat man (a) die spezifisch sozialen 'Erscheinungsformen' jener universellen Gesetzmäßigkeiten anzusehen, die im dialektischen Materialismus formuliert sind (Primat des Seins – hier: des gesellschaftlichen Seins – vor dem Bewußtsein; Gesetz des Umschlagens quantitativer in qualitative Veränderungen; Gesetz der Einheit und des Kampfes der Gegensätze; Korrelationen zwischen Inhalt und Form, Notwendigkeit und Zufall u.a.), (b) einige ursprünglich sozialen Gesetze wie das Zentralgesetz der sozialökonomischen Dynamik, das 'Gesetz der Übereinstimmung der Produktionsverhältnisse mit dem Charakter der Produktivkräfte' oder das Gesetz von der bestimmenden Rolle der Basis gegenüber den Bereichen des Überbaues.

Mit den allgemeinen Gesetzen, die ihrerseits stets eine 'spezifische Erscheinungsform' annehmen, sind in jedem Phänomen die spezifischen Gesetze assoziiert, die sich hinsichtlich ihres Kompetenzbereichs noch einmal unterscheiden: es gibt 1. Gesetze, die für eine Gruppe von Gesellschaftsformationen gültig sind (so das 'Gesetz des Klassenkampfes' und das 'Gesetz der sozialen Revolution' für die Formationen der Klassengesellschaft oder das 'Wertgesetz' für Produktionsweisen mit Warenaustausch); 2. Gesetze, die jeweils für eine einzelne Gesellschaftsformation gültig sind (so hat jede ihr besonderes 'ökonomisches Grundgesetz' – im Kapitalismus ist es das 'Mehrwert-Gesetz' – und andere Gesetze –

der Kapitalismus z.B. das Gesetz der Periodizität von Wirtschaftskrisen, der Sozialismus das Gesetz der planmäßigen und proportionalen Entwicklung der Wirtschaft mit seiner Klausel über das vorrangige Wachstum der Produktion von Produktionsmitteln); 3. Gesetze, die nur für bestimmte Stadien einzelner Gesellschaftsformationen gültig sind (so für den vormonopolistischen Kapitalismus das 'Gesetz der freien Konkurrenz', an dessen Stelle dann die Gesetzmäßigkeit der Bildung von Monopolen tritt; ebenso wird das sozialistische Gesetz der Güterverteilung nach Leistung vom Gesetz der Verteilung gemäß den Bedürfnissen abgelöst). Mit dem Übergang der Gesellschaft von einer Formation oder Etappe zur anderen modifizieren sich auch die Gesetze oder es treten (wie andere Autoren meinen) neue Gesetze an die Stelle der alten. Darin besteht die Historizität der Gesetze.

In ihren Aussagen über die eigentliche Ablaufsgesetzlichkeit der Geschichte, über die Gesetzmäßigkeit, mit der die Formationen aufeinander folgen, ist die sowjetische Histomat-Theorie bemerkenswert zurückhaltend. Man stellt zwar fest, daß der Fortschritt von niederen Stufen zu höheren etwas Gesetzmäßiges ist und man hält es auch für generell notwendig, daß auf die klassenlose Urgesellschaft eine Klassengesellschaft folgt, die ihrerseits notwendig wieder aufgehoben werden muß; die weiteren Details der Stufenfolge unterliegen jedoch der Variation. Den Grund für die fortschreitende Evolution der Menschheit sieht man dabei nicht in einem mehr oder weniger einfachen Faktum oder in einer einzigen Grundrelation, sondern in einem weitverzweigten Geflecht von Triebkräften und Entwicklungsursachen, deren resultativer Gesamteffekt der Fortschritt ist (und das keineswegs ohne Ausnahme: Stillstand, Regreß und Untergang sind als lokale Phänomene sehr wohl historisch möglich).

Es ist auffallend, daß der Kodex der sozialen Gesetze in der sowjetischen Literatur verhältnismäßig wenig Titel aufweist; selbst eine spezielle Abhandlung über die Gesetze wie jene von G. E. Glezerman nennt nicht viel mehr als die eben angeführten. Nicht weniger auffallend ist, daß von den wenigen ausdrücklich nominierten Gesetzen auch nur wenige so prägnant formuliert sind, wie man es von den Naturgesetzen gewöhnt ist. Oftmals besteht das 'Gesetz' einfach darin, daß man ein generelles Phänomen (z.B. Kriege) als wesensnotwendiges Attribut eines bestimmten Systemzusammenhanges prädiziert. Mehr dem Typus einer generellen 'Wenn-

so'-Formel nähert sich das ökonomische Korrespondenz-Gesetz, das (wie Glezerman sagt) die "Hauptbedingung der progressiven Entwicklung der Gesellschaft zum Ausdruck bringt": "es stellt fest, daß sich die Produktionsverhältnisse in Übereinstimmung mit der Entwicklung der Produktivkräfte ändern und daß zwischen ihnen entstehende Diskrepanzen beseitigt werden müssen, damit die Produktivkräfte einen genügenden Spielraum für ihre Entwicklung haben." [9] – Daß die explizit und prägnant formulierten sozialen Gesetze so spärlich sind, hat seinen Grund wohl in einer prinzipiellen (in der sowjetischen Literatur noch nicht genügend reflektierten) Schwierigkeit, das Typische und Wiederkehrende aus den einmaligen sozial-historischen Konstellationen herauszuheben und in Gesetzesformeln zu fixieren.

ANSATZPUNKTE FÜR DIE KRITIK

Unseres Erachtens ist es verfehlt, der marxistisch-leninistischen Histomat-Theorie den Vorwurf zu machen, ihre Konzeption von der Gesetzmäßigkeit des historischen Ablaufs führe zum Fatalismus und mache alle Appelle zu willentlichem historischen Handeln absurd. Die sowjetischen Theoretiker weisen solche Kritiken nachdrücklich zurück und sie könnten es noch wirksamer tun, wenn sie mit größerer Deutlichkeit den impliziten Sinn ihrer Vorstellung von den Entwicklungsgesetzen herausstellten. Vor aller Kritik und Diskussion bedarf es der Klärung, und auf sie zielen die nun folgenden Bemerkungen ab; die eigentlichen Probleme, die dahinter sichtbar werden, wollen wir vorerst nur andeuten. Der Einfachheit wegen sehen wir auch von einer Diskussion der inhaltlichen Aussagen der sowjetischen Theoretiker über das sozial-historisch Gesetzmäßige ab und konzentrieren uns ganz auf die formale Struktur des historischen Gesetzmäßig- und Notwendigseins. Weil die wirklich formulierten Gesetze in der Literatur so spärlich und ihre Formulierungen überdies in vielen Fällen problematisch sind, werden wir auch weniger von den Gesetzen als von der Notwendigkeit als einem mehr summarischen Ausdruck für die Nichtbeliebigkeit und Determiniertheit sozialer Phänomene und Prozesse sprechen. Wir wollen unsere kritischen Überlegungen unter drei thematische Aspekte stellen:

1. *Kategoriale Semantik und Syntax* (Bedeutungsanalyse der Grundbegriffe und der Aussagenverbindungen, in denen sie fungieren). Schon

im Vorfeld der eigentlichen Theoriebildung haben viele Unklarheiten und Fehler ihren Ausgangspunkt.

(a) *In abstracto* weiß man zwar, daß Gesetze *Relationscharaktere* sind und nicht substantielle Gebilde, Kräfte, Prozesse oder Tendenzen [10], praktisch jedoch umschreibt man ihre Präsenz (und ebenso auch das Moment der Notwendigkeit) mit sinnwidrigen bildhaften Ausdrücken ('wirken', 'herrschen', 'versklaven', 'blinde Kräfte', 'sich den Weg bahnen'), die nur eine schiefe Vorstellung von der Sache geben können.

(b) Überaus häufig ignorieren sowjetische Autoren den Unterschied zwischen 'Gesetzen' und 'gesetzmäßigen Phänomenen' (Merkmalen, Ereignissen u.a.), desgleichen den Unterschied zwischen Notwendigkeit und Notwendigem, Zufälligkeit und Zufälligem. Mit Vorliebe substituiert man das kategoriale Abstraktum ('die historische Notwendigkeit') und schreibt ihm Effekte zu, die nur ein Concretum (Aktionen sozialer Gruppen) haben kann; dabei verschwinden aber die realen Subjekte und Agentien hinter den kategorialen Abstraktionen.

(c) Von besonderer Bedeutung für die Sozialtheorie ist ein anderer, von fast allen sowjetischen Autoren systematisch mißachteter Bedeutungsunterschied zwischen dem *faktisch* oder faktologisch, d.h. in der 'Logik' (Realkonsequenz) einer faktischen Ereignisfolge Notwendigen, dem Unvermeidlichen, Zwangsläufigen, und dem in einem *final-normativen* Kontext als Mittel für einen Zweck oder als Zweck selbst Notwendigen, dem Erforderlichen oder Gebotenen.[11]

2. *Phänomenologie und Typologie der sozialen Gesetzesbeziehungen.* Bei einem so komplexen Gebilde wie der menschlichen Gesellschaft muß man *a priori* mit einer Vielfalt von Typen gesetzlicher Korrelationen rechnen, die sehr unterschiedlich lokalisiert und strukturiert sind. In der Tat zeigt auch der im Histomat nominierte (und in den Demonstrationsbeispielen begegnende) Kodex sozialer Struktur- und Entwicklungsgesetze eine gewisse Typenvielfalt, doch die sowjetischen Theoretiker haben sich davon, soweit wir sehen, noch nicht genügend ausdrücklich und systematisch Rechenschaft abgelegt und sie pflegen darauf in den generellen Aussagen über Gesetzmäßigkeit und Notwendigkeit in der Geschichte nicht die nötige Rücksicht zu nehmen. Es hat den Anschein, als wollten sie mit zu wenig und mit zu einfachen Worten zu viel in einem sagen. Wir wollen weiter unten versuchen, in einer differenzieren-

den Interpretation die Umrisse der impliziten historisch-materialistischen Typologie sozialer Determinationsstrukturen deutlicher sichtbar zu machen.

3. *Analyse der Konstitution sozialer Notwendigkeit.* Gesetzesformeln und Aussagen über Notwendigkeit unterliegen nur zu leicht der Gefahr einer 'Fetischisierung', wenn man nicht ständig im Auge behält, (a) daß Gesetze *Relationen* sind, deren Natur ganz und gar davon abhängt, welche *relata* durch sie (oder besser 'in ihnen') miteinander verbunden sind. Man hat es bei der Analyse des Sozialen mit vielerlei 'Prozessen', 'Ereignissen', 'Zuständen', 'Verhältnissen' sowie mit Korrelationen zwischen ihnen zu tun, die eigentlichen und letzten Träger des sozialen Geschehens sind aber stets die in gesellschaftlicher Wechselwirkung agierenden menschlichen Individuen. In ihrer Sphäre sind entscheidende Aufschlüsse über soziale Gesetzmäßigkeit und Notwendigkeit zu suchen (*anthropologischer Rekurs* als unerläßliches Prinzip). (b) Es erscheint dringend geboten, auch für die Sozialtheorie des Histomat jene Überlegungen fruchtbar zu machen, die man im naturwissenschaftlich-naturphilosophischen Bereich über die Beziehung zwischen der 'Makro-Gesetzlichkeit' eines Systemganzen (oder eines Ensembles) und der 'Mikro-Gesetzlichkeit' seiner Subsysteme und Elemente angestellt hat; das führt auch auf das Problem des 'statistischen' und des Wahrscheinlichkeits-Charakters von Gesetzen im sozialen Bereich.[12] (c) Die Bedeutungsanalyse des Begriffs der 'Notwendigkeit' und die Phänomenologie der sozialen Gesetzmäßigkeit stellen die Konstitutionsanalyse vor ihre, wie uns scheint, wichtigste Aufgabe: das *finale Moment* in der Determination des sozialen Zusammenhangs und seiner historischen Evolution (und damit auch den fundamentalen Unterschied zur Gesetzlichkeit im Bereich des Physischen) klar herauszuarbeiten. In der sowjetischen Literatur sind die genannten Aufgaben lediglich mit verstreuten Bemerkungen einzelner Autoren bezeichnet, aber noch nicht systematisch in Angriff genommen worden. Man betont mit solchem Nachdruck die 'Objektivität' der sozialen Gesetze und der historischen Notwendigkeit, d.h. ihre Unabhängigkeit vom 'Willen und Bewußtsein' der Menschen, daß darüber die Frage nach dem Anteil des Menschen als des Subjekts (in einem umfassenden Sinne verstanden) an der Konstitution der sozialen Gesetze ganz aus dem Blickfeld zu verschwinden droht. Hier klafft eine breite Lücke in der Theorie; wir wollen andeuten, welche Überlegungen dazu angetan sein könnten, sie zu schließen.

TYPEN GESETZMÄSSIGER STRUKTUREN IM SOZIALEN BEREICH

Da soziale Gesetze – wie auch immer ihr Inhalt beschaffen sein mag – stets Korrelationen im Felde menschlicher Handlungen, ihrer Motive, Ziele, Mittel und Resultate sind, kann es gar nicht anders sein, als daß sie einen finalen Kontext entweder direkt involvieren oder wenigstens voraussetzen. Auch in zahlreichen sowjetischen Formulierungen ist das finale Moment unschwer zu erkennen – wenn etwa von 'Forderungen' der Gesetze die Rede ist oder wenn die übliche 'wenn – so'-Formel des Gesetzes final zu einem 'hypothetischen Imperativ' abgewandelt erscheint ('wenn B sein soll, so muß A sein'). Auf die Konstitution und Fundierung solcher Korrelationen und ihres Notwendigkeitsmodus wollen wir noch zu sprechen kommen; vorerst genügt es, dieses Element bei der Beschreibung der verschiedenen Strukturtypen hervorzuheben. Wo das 'Notwendige' ein Effekt ist, der unter bestimmten Gesetzen aus entsprechenden real-dynamischen Bedingungen zwangsläufig entsteht, wollen wir von einer '*faktischen*' Notwendigkeit sprechen; wo es um das Erforderlichsein eines Mittels für einen Zweck geht, nennen wir die Notwendigkeit eine '*finale*'; die Notwendigkeit des Zweckes (und der Zwecksetzung) in bezug auf die zwecksetzende Instanz bezeichnen wir als eine '*axiologische*', da sie in einem Wertvollsein fundiert ist. Mit diesen – in der sowjetischen Literatur nicht gebräuchlichen – Distinktionen wird es leichter sein, die komplexe Determination des sozialen Geschehens zu charakterisieren.

Wir wollen nun versuchen, aus der marxistisch-leninistischen Literatur – ohne Anspruch auf Vollständigkeit – die Modelle von vier verschiedenartigen determinativen Strukturen herauszuarbeiten. Wir wollen dabei das Hauptaugenmerk auf eine Beschreibung der determinativen Instanzen und der Art des bestehenden Dependenzverhältnisses richten und nicht auf die eigentlichen 'Gesetze' die (wie schon bemerkt) oft nicht in der wünschenswerten Prägnanz formuliert und vielleicht auch gar nicht formulierbar sind.

1. *Die Notwendigkeit, deren Einsicht frei macht.* Die Welt besteht, wie auch die dialektisch-materialistische Ontologie konstatiert, aus zahllosen 'relativ selbständigen' Gebilden verschiedener Konsistenz, Struktur und Stabilität, meistens kurz 'Dinge und Erscheinungen' oder – aus der Sicht des Menschen als des 'Subjekts' – seine 'Objekte' genannt. In und

zwischen diesen Objekten waltet eine ihnen selbst eigene Ordnung, d.h. sie gehen entsprechend ihrer bestimmten Beschaffenheit miteinander bestimmte Konstellationen ein und zeigen in ihnen ein gleichermaßen bestimmtes Verhalten. Die Typen oder Schemata möglicher Korrelation zwischen Objekten, Bedingungen und Verhaltenseffekten sind die Gesetze, die man im Idealfall mit einer Formel 'wenn A, so B' begrifflich fixieren kann.

Objektive Gesetze der natürlichen und gesellschaftlichen Vorgänge kann der Mensch in seinem Streben nach Selbstbestimmung und Willensverwirklichung nicht außer Kraft setzen; er kann seine eigenen Ziele im Umgang mit Objekten jeglicher Art nur erreichen, wenn er der eigengesetzlichen Wirkweise dieser Objekte Rechnung trägt. Das ist der Sinn der Engelsschen Formel: Freiheit ist Einsicht in die Notwendigkeit (einer Abwandlung von Bacon's *natura parendo vincitur*). Wenn es auf den ersten Blick so aussieht, als ordne sich der Mensch hier einer ihm fremden 'Notwendigkeit' unter, so erweist sich jedoch bei näherem Zusehen, daß diese Unterordnung nur ein Teilverhältnis ausmacht; für das Ganze dieser Prozedur ist vielmehr charakteristisch, daß der Mensch die Determination der Objekte seiner eigenen ein- und unterordnet. Soweit er die Objekte mit seinen Mitteln und Kräften 'manipulieren' (z.B. sie versetzen, ihre Bedingungen umgruppieren und modifizieren) kann, ist er auch imstande, sie mitsamt ihrer faktisch-gesetzlichen Wirkweise in einen von ihm konstruierten finalen Mittel-Zweck-Kontext einzufügen. Die Formel der faktischen Gesetzlichkeit: 'wenn A, so B' erfährt dabei eine Umformung ('Überformung', wie N. Hartmann sagt): 'wenn B sein soll, so muß A gesetzt werden' – d.h. sie wird zum Element eines 'hypothetischen Imperativs'.

Eine Nötigung des Menschen, eine 'Herrschaft' über ihn involviert diese Variante des Notwendigseins in keiner Weise. Der Mensch hat Distanz gegen sie, er *wird* nicht 'von den Gesetzen bestimmt', sondern er *läßt sich* von ihrer Erkenntnis bei der Wahl von Mitteln leiten, mit denen er *seine* Ziele verwirklicht. Es ist übrigens nicht korrekt, hier von 'Forderungen' (oder Erfordernissen) des Gesetzes zu sprechen, wie manche sowjetischen Autoren es tun.[13] Die Gesetze von Naturobjekten 'fordern' überhaupt nichts, erst durch die menschliche Zwecksetzung kommt etwas Imperativisches ins Spiel. (Von den Gesetzen der Statik könnte man ebensogut sagen, sie 'fordern' den Einsturz eines Hauses, wenn man statt Zement

grauen Staub als Bindemittel verwendet.) Auch ist es wenig sinnvoll, von einer 'Ausnützung' *der Gesetze* zu sprechen; nicht die Gesetze sind unmittelbar das, womit der Mensch umgeht, sondern Objekte, deren Wirkweise gesetzlich bestimmt ist. Ausnützen kann man Naturstoffe, Naturprozesse, die ihnen innewohnenden Energien und allenfalls noch die Kenntnis von ihrer gesetzlichen Wirkweise.

Wie Engels bemerkte, gibt es die Möglichkeit, gesetzmäßige Effekte planmäßig für menschliche Zwecke einzusetzen, auch im Bereich jener Gesetze, die "das körperliche und geistige Dasein der Menschen selbst regeln".[14] Man möchte erwarten, daß im Anschluß an diese Formel eine umfassende Theorie von den gesetzmäßigen Verhaltens- und Reaktionsweisen menschlicher Individuen und Gruppen entwickelt worden wäre; der sowjetische Histomat hat indes (anders als die Variante von K. Kautsky) bislang noch keine derartige Lehre von der 'Menschennatur' hervorgebracht, sondern das Gesetzmäßige vorwiegend im Felde der sozial-historischen Beziehungen gesucht. Soweit es sich dabei um Gesetze der *fortschreitenden Entwicklung* der Gesellschaft und speziell um Gesetze der sozialistischen Formation handelt, tragen auch sie ganz eindeutig den Charakter hypothetischer Imperative: so das weiter oben wiedergegebene Übereinstimmungs-Gesetz, das 'Gesetz der planmäßigen und proportionalen Entwicklung der Volkswirtschaft', das 'Wertgesetz' in dem eingeschränkten Bereich, den es im Sozialismus noch behält, das Gesetz der Güterverteilung nach dem Maß der Leistung – sie alle sagen etwas über Bedingungen aus, die erfüllt sein müssen, wenn ein bestimmter Effekt entstehen soll. Manche von ihnen zeigen übrigens recht deutlich ihre Fundierung in einer elementaren Gesetzmäßigkeit (von der Art einer Durchschnitts-Typik) menschlichen Verhaltens: das zuletzt erwähnte Gesetz der Arbeitsentlohnung nach der Leistung beruht offenkundig darauf, daß die meisten Menschen ohne materiellen Anreiz nicht zu größeren Leistungen bereit sind. Wenn man – aus welchen Gründen auch immer– hohe Arbeitsleistungen haben möchte, dann muß man bei gegebenen Verhaltensdispositionen einen materiellen Anreiz dazu schaffen. In dieser Hinsicht scheint in der Tat eine Analogie zwischen einigen Sozialgesetzmäßigkeiten und jenen Gesetzen der Naturobjekte zu bestehen, durch deren Einsicht menschliche Subjekte ihre Ziele planmäßig verwirklichen.

2. *Die Notwendigkeit, die den Menschen zum Sklaven macht.* In der bisherigen (vorsozialistischen) Geschichte ist der soziale Makroprozeß stets

planlos verlaufen, weil die Bestrebungen der einen Menschen jedesmal von denen der anderen durchkreuzt wurden. Die elementare Verlaufsform des Prozesses erweist sich nach marxistischer Anschauung als der Entstehungsgrund einer Gesetzmäßigkeit und Notwendigkeit eigener Art, über welche die sowjetischen Autoren mit reichlich dramatischen Ausdrücken zu schreiben pflegen. Es handelt sich hier um die Unausweichlichkeit katastrophaler Ereignisse wie Völkerkriege und Wirtschaftskrisen, die zahllose Menschen vernichten und unendliches Leid erzeugen. Da in der sowjetischen Literatur die Gewohnheit verbreitet ist, den Gesetzen alle jene Eigenschaften zuzuschreiben, die eigentlich den realen Agenten und Phänomenen des historischen Prozesses zukommen, liest man oft, daß die sozialen Gesetze 'als blindwirkende Kräfte' über die Menschen 'herrschen', sie 'zu Sklaven machen', 'hinter ihrem Rücken wirken' u.a.m. Läßt man solche Metaphern beiseite, dann ergibt sich diese Feststellung: aus einem zielstrebigen, aber nur auf individuelle und nächstliegende Ziele gerichteten und nicht gesamt-gesellschaftlich koordinierten Invididual- und Gruppenverhalten bildet sich als ungewollte Resultante eine Ereigniskette mit einer bestimmten Typik, zu der auch Effekte gehören können, die den Bestrebungen aller oder der meisten Menschen radikal zuwiderlaufen. Man sagt, die Klassengesellschaft und insbesondere das kapitalistische Weltsystem seien eben so konstruiert, daß sie solche destruktiven Effekte zwangsläufig hervorbringen.

In der historischen Sicht des Marxismus erscheint dies als Fall einer faktischen Notwendigkeit von Ereignisfolgen, deren Bedingungskomplex noch keiner bewußten, planmäßigen Gestaltung unterliegt – ähnlich den Entstehungsbedingungen von Orkanen. Wie Engels ausführte, zeugt die blind-elementare Verlaufsform des sozialen Makroprozesses davon, daß der *homo sapiens* noch nicht völlig aus dem Tierreich ausgeschieden ist. Erst mit der Überwindung des sozialen Atomismus der kapitalistischen Produktionsweise und ihrer Anarchie werden die Menschen zu "Herren ihrer eignen Vergesellschaftung" und können ihre Geschichte "mit vollem Bewußtsein selbst machen." [15] Die (wie auch immer konstituierte) 'Gesetzmäßigkeit', die jenen destruktiven Effekten eigen ist, gilt somit als eine historisch vorübergehende. Es kann indessen leicht zu Mißverständnissen kommen, weil sowjetische Autoren nicht selten *diesen Typus* sozialer Gesetzmäßigkeit im Auge haben, wenn sie *generell* über soziale Gesetze schreiben. In den *Osnovy marksistskoj filosofii* heißt es z.B., man

könne "die blinde, unerkannte Notwendigkeit in eine erkannte Notwendigkeit, d.h. in Freiheit verwandeln" [16], und ähnlich: "Solange die sozialen Gesetze nicht erkannt sind und die Menschen ihnen zuwiderhandeln, wirken diese Gesetze als den Menschen feindliche elementare Kräfte. Wenn sie jedoch bekannt sind, ... haben die Menschen die Möglichkeit, sie zu beherrschen." [17] Von den Verstößen gegen die kategoriale Semantik abgesehen, ist hier vor allem eines fragwürdig: sind es *dieselben* 'Gesetze', die zuerst als 'blinde Kräfte' die Menschen tyrannisieren, dann aber von ihnen gemeistert und zu gehorsamen Dienern gemacht werden? Daran wird man wohl zweifeln müssen: es handelt sich allem Anschein nach um grundverschiedene Typen von Gesetzmäßigkeit. Jene, die den destruktiven Effekten eigen ist, fällt zusammen mit der elementaren Verlaufsform des Prozesses fort; und jene, die der planmäßigen Gestaltung sozialer Verhältnisse zugrunde liegt, ist anders konstituiert und lokalisiert. Es mag allenfalls sein, daß beide Typen gewisse Elemente gemeinsam haben. Das wäre gesondert zu prüfen.

3. *Die Notwendigkeit des historischen Fortschritts.* Der historische Materialismus lehrt bekanntlich, daß die Geschichte der Gesellschaft im ganzen das Bild eines Fortschritts von niederen zu höheren Stufen zeigt. Wenn man die fortschreitende Evolution als ein 'Gesetz' (als etwas Gesetzmäßiges) bezeichnet, so denkt man offensichtlich nicht an eine der vielen sozialen Teilgesetzlichkeiten, sondern an eine Konstante des Gesamtprozesses. Als das Grundgesetz der sozialen Vorwärtsbewegung betrachtet man in der marxistisch-leninistischen Philosophie das schon mehrmals erwähnte 'Gesetz der Übereinstimmung der Produktionsverhältnisse mit dem Charakter der Produktivkräfte'. Man pflegt es in eine Reihe mit jenen Gesetzen zu stellen, die wir als den ersten unserer vier Typen anführten, und man spricht auch ganz in diesem Sinne von einer 'Ausnützung' dieses Gesetzes in der historischen Praxis der Menschen – wobei die Ausnützung in diesem Falle nichts geringeres als die Durchführung einer sozialen Revolution ist. So heißt es, die Bourgeoisie habe in der Epoche des aufsteigenden Kapitalismus dieses Gesetz 'unbewußt' ausgenützt, das Proletariat jedoch tue es in der sozialistischen Revolution bewußt.[18] Wir wollen uns darauf beschränken, das Problem der Notwendigkeit progressiver Veränderungen der Gesellschaftsstruktur an Hand der Aussagen über die Notwendigkeit des Sozialismus-Kommunismus zu erörtern.

Es ist sehr die Frage, ob das Übereinstimmungs-Gesetz schon genügt, um eine einsichtige Begründung für die Notwendigkeit der sozialistischen Transformation zu geben, oder ob man auf weitere, dahinter stehende Begründungsinstanzen rekurrieren muß. "Die tiefste Ursache der sozialen Revolutionen", heißt es in den *Osnovy marksistskoj filosofii,* "ist der Konflikt zwischen den neuen Produktivkräften und den überlebten Produktionsverhältnissen." [19] Es erweist sich als notwendig, den Konflikt durch die Herstellung neuer Produktionsverhältnisse zu lösen. Für unsere Gegenwart bedeutet das: an die Stelle des Privateigentums an den Produktionsmitteln hat das gesellschaftliche Eigentum zu treten; an die Stelle der Anarchie des Marktes die Planung; an die Stelle der Klassendifferenzierung eine klassenlose Gesellschaft. Und warum? Weil die alten Verhältnisse ein Hindernis für die weitere Entwicklung der Gesellschaft geworden sind. Die soziale Umgestaltung fungiert als (final) notwendiges Mittel für die Verwirklichung eines Zwecks, der zunächst mit der Formel 'weitere Entwicklung der Gesellschaft' bezeichnet ist. Der determinativen Struktur dieses Zwecks gilt unser besonderes Interesse.

Die 'Notwendigkeit der Aufhebung der Klassen', der die *Osnovy marksistskoj filosofii* einen eigenen Abschnitt widmen [20], erscheint primär als eine *ökonomische* Notwendigkeit. Das Ziel sozialer Bestrebungen war sie schon seit langem, aber früher stand sie "im Widerspruch zu den Erfordernissen des ökonomischen Fortschritts"; denn die Gesellschaft konnte ihre Produktivkräfte und ihre Kultur nur "auf der Grundlage des Privateigentums, der Trennung der körperlichen von der geistigen Arbeit und der Ausbeutung der Mehrheit durch die Minderheit entwickeln". Heute aber "deckt sich die Forderung nach Abschaffung der Klassenunterschiede ... zum erstenmale mit den Bedürfnissen des ökonomischen Fortschritts, mit der objektiven Notwendigkeit. Die modernen Produktivkräfte fordern die Aufhebung des Privateigentums und die Einführung des gesellschaftlichen Eigentums an den Produktionsmitteln. ... Die Aufhebung des Gegensatzes und später auch des wesentlichen Unterschiedes zwischen geistiger und körperlicher Arbeit ist in unserer Epoche eine unbedingte Notwendigkeit geworden. Beim heutigen Stand der Produktivkräfte ist es durchaus möglich, nicht nur einer Minderheit, sondern allen Mitgliedern der Gesellschaft eine freie Entwicklung zu sichern. Das aber wird die Entwicklung der Gesellschaft wesentlich beschleunigen, da es den Erfordernissen der Entwicklung der Produktion entspricht. ... Die Auf-

hebung der Klassen erfolgt durch Aufhebung des Privateigentums an den Produktionsmitteln und bringt eine sozialökonomische und moralische Erneuerung der Gesellschaft mit sich, indem sie der Gier nach Aufhäufung von Reichtümern, der Zwietracht, dem Egoismus und allen Lastern der Klassengesellschaft ein Ende setzt." [21]

An diesen Ausführungen wird deutlich, worin man den zentralen Zweck aller gesellschaftlichen Evolution sehen soll, dem alle übrigen Momente entweder als Mittel zugeordnet oder als Folgeerscheinungen nachgeordnet sind: die Entwicklung der Produktivkräfte. Sind aber die marxistisch-leninistischen Theoretiker wirklich der Meinung, die Entwicklung der Produktivkräfte fungiere als Selbstzweck? Es mag sein, daß sich in der frühen Entwicklungsperiode der Sowjetunion eine Akkumulations-Ideologie breit gemacht hat, die den propagandistischen Alltag auch heute noch weithin beherrscht; eine ernsthafte theoretische Position kann das aber nicht sein. Es ist zu offenkundig, daß die Produktion und die Entwicklung der Produktivkräfte in letzter Instanz nichts anderes sein können als ein Mittel zur Befriedigung physischer Bedürfnisse der Menschen. Die letzte Fundierung jeder 'ökonomischen Notwendigkeit' liegt darin, daß die Bedürfnisbefriedigung, der Zweck des Produzierens, in bezug auf den Bedürfnisträger evidenterweise axiologisch notwendig ist; daß der Mensch ein Wesen ist, für das es 'Güter' mit einem 'Wert' gibt, ist der nicht weiter rückführbare Grund alles Notwendigseins in diesem Bereich. Es ist ein Notwendigsein für ein Subjekt, ungeachtet aller 'objektiven', sacheigenen Gesetzlichkeit im Felde der Mittel.

Es fragt sich aber weiter, ob man der Produktion materieller Güter bei der Konstitution der sozial-historischen Gesamtnotwendigkeit wirklich jene Zentralstellung – um nicht zu sagen: Monopolstellung – einräumen darf, die sie im oben zitierten sowjetischen Lehrtext einzunehmen scheint. Die historisch-materialistische These vom 'Primat' der materiellen ökonomischen Verhältnisse war seit jeher leicht dem Mißverständnis ausgesetzt: Anhänger wie Kritiker waren oft geneigt, den mit dem Ausdruck 'Grundlage' umschriebenen *Seins*primat (der Bedingung vor dem Bedingten) als einen axiologischen Vorrang, als *Wert*primat zu deuten – was aber sicherlich nicht im Sinne von Marx ist. Man kann die Versorgung der Gesellschaft mit Produktivkräften und materiellen Gütern in der Tat als bedingend für viele ihrer kulturellen Güter, sozialen Beziehungen und für Elemente ihrer Gesittung ansehen. Das schließt jedoch nicht aus, daß den

letzteren in der Gesamtwertordnung des menschlichen Daseins ein selbständiger Platz zukommt, daß sie ihre eigenen Wertkriterien haben, die nicht nur Funktionen des ökonomischen Nutzwertes für die Sphäre der Produktion sind; die Menschen sind nicht nur Träger physischer, sondern auch ursprünglich sozialer, geistiger und ästhetischer Bedürfnisse. Bei der Projektion von Zielpunkten der sozialen Gesamtentwicklung sind diese Bedürfnisse konstitutiv beteiligt. Der 'kategorische Imperativ', den Marx proklamiert hat, fordert nicht etwa bloß, alles aus dem Wege zu räumen, was die Entwicklung der Produktivkräfte verlangsamt, sondern "alle Verhältnisse umzuwerfen, in denen der Mensch ein erniedrigtes, ein geknechtetes, ein verlassenes, ein verächtliches Wesen ist".[22] Die determinative Funktion ökonomischer Bedingungen besteht in vielen Fällen nicht so sehr darin, daß sie etwas *notwendig* machen, sondern darin, daß sie etwas real *möglich* machen, was aus anderen Gründen erwünscht oder geboten ist.

Die historische Notwendigkeit *sozialer Fortschritte* ist, wie uns scheint, die essentiell geforderte und in der betreffenden historischen Situation realisierbare, möglichst umfassende und harmonische Synthese aus den Projektionen der natürlichen und der historisch entstandenen menschlichen Bedürfnisse. Die anschauliche Form dieser Synthese ist das Idealbild einer zu verwirklichenden Gesellschaftsordnung. Antizipationen dieser Art sind nicht einfach eine Vorstellung von dem, was kommen *wird,* sondern vor allem auch eine Idee dessen, was werden und durch zielstrebiges Gestalten entstehen *soll.* Ihrem determinativen Charakter nach ist die Fortschritts-Notwendigkeit ein axiologisch fundierter kategorischer Imperativ, dem eine Vielzahl hypothetischer Imperative subsumiert ist. Dieser Imperativ 'gilt' – wenigstens in gewissen Grenzen – unabhängig davon, ob das in ihm Geforderte auch faktisch realisiert wird. Eine 'Notwendigkeit' dieses Typus bedeutet auch keinerlei Zwangsläufigkeit des historischen Prozesses; in ihr liegt gerade das, was die menschliche Geschichte von einem 'naturgeschichtlichen Prozeß' unterscheidet.

4. *Die Unvermeidlichkeit des historischen Fortschritts.* Die Begründer des Marxismus haben sich einmal ausdrücklich dagegen erklärt, daß man den Kommunismus als ein 'Ideal' deutet, als einen Zustand, der hergestellt werden *soll;* er sei vielmehr eine 'wirkliche Bewegung'.[23] Das war offenbar eine Reaktion gegen die blühende Zukunftsphantastik der 'utopischen Sozialisten' – und man darf wohl sagen: eine übersteigerte Reaktion. Es

steht ganz außer Zweifel, daß das Element der Idealbildung auch in der Programmatik des marxistischen Sozialismus wirksam ist, nur liegt hier eben die Betonung darauf, daß die Projektion idealer Ziele nicht genügt, wenn nicht außerdem auch gesellschaftliche Kräfte da sind, die ihre Verwirklichung gewährleisten können.

Die *Verwirklichung* historischer Fortschritte hat eine andere determinative Struktur als ihre *essentielle Konstituierung* ihrer Zielpunkte, obwohl die Bedingungskomplexe teilweise zusammenfallen. (So war z.B. nach marxistisch-leninistischer Überzeugung 1918–1923 auch für Deutschland der Sieg der sozialistischen Revolution essentiell notwendig, doch er war, wie die Erfahrung zeigt, nicht faktisch unvermeidlich.) Es scheint jedoch, daß der Marxismus den historischen Fortschritt und insbesondere den Fortschritt zum Sozialismus auch im faktischen Sinne für notwendig oder zwangsläufig ansieht, sofern man nur den räumlich-zeitlichen Rahmen der Betrachtung genügend weit spannt. Schon im 'Kommunistischen Manifest' ist davon die Rede, daß der Untergang der Bourgeoisie und der Sieg des Proletariats 'gleich unvermeidlich' seien. Geradezu als etwas Unabwendbares erscheint der Sozialismus bei jenen Propagandisten des Marxismus-Leninismus, die sein Kommen für ebenso notwendig erklären wie die Ablösung der Jahreszeiten. An solche Redewendungen haben sich jene Kritiker gehalten, die den Marxismus als eine im Grunde fatalistische Geschichtslehre ansahen und es unverständlich fanden, daß er die Menschen auch noch zur Aktion aufruft.

Ob diese Kritik berechtigt ist oder nicht, das hängt davon ab, wie sich der Marxismus-Leninismus das determinative Bezugssystem, den Gesamtkomplex der Bedingungen und Faktoren vorstellt, auf Grund deren die Notwendigkeit des Sozialismus im Sinne einer Zwangsläufigkeit bestehen soll. Irgendeine meta-historische Garantie scheidet hier von vornherein aus. Zwar sprechen sowjetische Theoretiker ihre Gewißheit vom Sieg des Fortschritts gern in einer universellen Gesetzesformel von der 'Unüberwindlichkeit des Neuen' aus; doch uns scheint, diese Formel erklärt kaum etwas, sondern bedarf vielmehr selbst der Erklärung. Die Zwangsläufigkeit einer historischen Ereignisreihe läßt sich nur empirisch in konkreter Analyse der historischen Situation diagnostizieren; sie kann nur in der Wirksamkeit sozialer Gruppen und in ihrem 'Kräfteverhältnis' beschlossen liegen. Eine faktische Notwendigkeit des Sozialismus kann nur in der Weise bestehen, daß eine genügend große und genügend dafür

qualifizierte Zahl von Menschen auf Grund ihrer Erfahrungen und ihrer typischen Reaktionsweisen (einschließlich der Empfänglichkeit für revolutionäre Ideen) dahin kommt, eine überlegene Kraft für die Verwirklichung des axiologisch und final Notwendigen aufzubieten. Das wird dann geschehen, wenn die axiologische Notwendigkeit des 'Neuen' in eben jener Wertordnung besteht, die auch für das Wertempfinden der betreffenden Menschen evident ist (weil das Neue die Verkörperung ihrer eigenen Bestrebungen ist), und wenn die Menschen auch dahin kommen, die finale Notwendigkeit bestimmter Mittel (z.B. des revolutionären Kampfes) für die Erreichung jener Zwecke einzusehen.[24] Dies ist das idealtypische Modell eines faktisch notwendigen gesellschaftlichen Fortschritts, über dessen Sieg bereits in einem weitverzweigten Geflecht real vorhandener Bedingungen vorentschieden ist. Doch faktisch notwendig kann in bestimmten Abschnitten des historischen Prozesses bei entsprechend eindeutigem Kräfteverhältnis auch ein Sieg rückschrittlicher Gruppen sein, und wie die Erfahrung lehrt, treten auch die 'Kräfte des Fortschritts' nicht immer in der fortschrittlichsten, ihrem Ziel angemessenen Weise in Aktion. Dem trägt die marxistisch-leninistische Geschichtsphilosophie mit ihrer These von der 'Widersprüchlichkeit' des historischen Fortschritts in den antagonistischen (vorsozialistischen) Gesellschaftsformationen Rechnung. Die andere These, daß der Fortschritt im Sozialismus einen harmonischen Charakter annimmt, dürfte vorerst allerdings mehr Programm als Konstatierung sein.

Es ist hier nicht unsere Absicht, die inhaltliche Richtigkeit der marxistisch-leninistischen Aussagen über das Gesetzmäßige und Notwendige in der Geschichte und in der gegenwärtigen weltgeschichtlichen Situation zu diskutieren; uns kam es lediglich darauf an, die vom Histomat ermittelten Arten des sozial-historischen Gesetzmäßig- und Notwendigseins zu analysieren und den formalen Typus des historischen Determinismus zu kennzeichnen, den die sowjetischen Philosophen verfechten. Unsere kurze Betrachtung dürfte bereits gezeigt haben, daß dieser Determinismus von einer recht komplexen Beschaffenheit ist. Er impliziert keinen Fatalismus, d.h. keine Aufhebung der Bedeutsamkeit und der Autonomie menschlichen Strebens und Handelns, er sagt lediglich etwas über eine bestimmte, nicht-beliebige Gerichtetheit dieses Handelns aus. Wir haben angedeutet, worin wir die wesentlichsten Konstruktionsmängel dieses Determinismus

sehen. Zum einen ist es ein erheblicher Mangel an begrifflicher Präzision und Differenzierung, um vieles schwerer aber wiegt unseres Erachtens der Mangel, daß die sowjetische Philosophie bei der Analyse der sozialen Gesetzmäßigkeit *nicht radikal genug* zu Werke geht – und zwar ganz buchstäblich: daß sie nicht bis zur Wurzel vordringt. "Die Wurzel für den Menschen ist aber der Mensch selbst", sagte Marx.[25] Es kommt also darauf an – und eben das fehlt in den sowjetischen Texten am meisten –, den *Anteil des Menschen als des historischen Subjekts an der Konstitution der historischen Gesetzmäßigkeit* zu klären. Unterläßt man das, so verfällt man in einen ähnlichen Fehler, wie ihn einst Marx an Hegel gerügt hat: man macht 'Verhältnisse' und ihre 'Gesetze' zum Subjekt und das eigentliche, tätige Subjekt zum Prädikat. Das bedeutet in gewissem Sinne nichts geringeres als eine Degradierung des Subjekts.

DIE OBJEKTIVE NOTWENDIGKEIT UND DAS HISTORISCHE SUBJEKT

Die sowjetischen Lehrtexte kennzeichnen die gesellschaftliche Entwicklung als einen 'naturgeschichtlichen Prozeß' und wollen damit sagen, "daß es sich um einen notwendigen, gesetzmäßigen, objektiven Prozeß handelt, der nicht vom Willen der Menschen abhängt, obwohl er sich aus den Handlungen von Menschen, die über Willen und Bewußtsein verfügen, zusammensetzt".[26] Und im gleichen Sinne sagt man von den Gesetzen: "Die Gesetze der gesellschaftlichen Entwicklung sind objektive Gesetze. Sie sind nicht nur vom Willen und Bewußtsein der Menschen unabhängig, sondern bestimmen selbst den Willen, das Bewußtsein und die Tätigkeit der Menschen." [27] Liest man solche Sätze, dann drängt sich die Frage auf: kommt dem Menschen als dem Subjekt der Geschichte etwa gar nur eine *exekutive* Funktion zu, während er von der historischen *Legislative* ausgeschlossen bleibt? Wenn man einen solchen Eindruck vermeiden möchte, muß man um einiges genauer angeben, was an der Geschichte 'objektiv', d.h. von den menschlichen Subjekten, ihrem Willen und Bewußtsein unabhängig zustande kommt. In welchem Sinne kann man sagen, der soziale Prozeß – die Gestaltung und Umgestaltung der gesellschaftlichen Beziehungen zwischen den Menschen – sei eine 'objektive' und von 'objektiven Gesetzen' bestimmte Ereignisfolge? Wir denken hier wohl zuerst an jene Verlaufsform der Geschichte, in der die Resultante der zahllosen Einzelaktionen ungewollt ist; aus den Texten geht

jedoch hervor, daß man durchaus die ganze Geschichte im Auge hat, also auch jenen bevorstehenden Abschnitt der 'mit vollem Bewußtsein gemachten' Geschichte. Es muß den Anschein haben, als stehe das Subjekt mit seinen Interessen und Bestrebungen der 'objektiven Gesetzgebung' des Prozesses prinzipiell fern und als könne sich allenfalls eine äußerliche Übereinstimmung des 'objektiven Ganges' mit diesen Bestrebungen einstellen. So heißt es in den *Osnovy marksizma-leninizma,* die Kenntnis der objektiven Gesetzmäßigkeit gestatte es den Menschen, "das Endziel der Bewegung klar zu sehen, wie es sich aus dem gesamten Gang der gesellschaftlichen Entwicklung abzeichnet", und in der Ära des Sozialismus falle die "objektive Entwicklungslinie" der Gesellschaft mit den "Interessen, Bestrebungen und Wünschen der Mehrheit der Gesellschaftsmitglieder" zusammen.[28] Was bedeutet die unklare Formel, das Endziel zeichne sich aus dem gesamten Gang des Prozesses ab – ist es nicht erlaubt zu sagen, es sei eben durch die Grundrichtung der Interessen der Subjekte konstituiert? Das muß zuerst klargestellt werden, bevor eine weitere Diskussion sinnvoll wird.

Unsere Überlegungen zum Problem der progressiven Entwicklung der Gesellschaft haben zu der These geführt, daß alles praktisch-prospektive Notwendigsein letzten Endes in einer elementaren (teils natürlich-konstanten, teils historisch variablen) Wesensgesetzlichkeit oder Verhaltenstypik der menschlichen Subjekte fundiert ist – einer Wesensgesetzlichkeit, die in verschiedenen Wertdimensionen (vitalen, sozialen, ästhetischen) liegt und darum nur im thematischen Rahmen einer axiologischen Betrachtung des Sozialen diskutierbar ist.[29] Sie kann, obgleich es eine Gesetzlichkeit der Subjektsphäre ist, dennoch in einem ganz bestimmten Sinne (wie man seit Platon und Aristoteles weiß) auch 'objektiv', d.h. von Meinung und Willkür der einzelnen Subjekte unabhängig gelten.

Davon ausgehend erscheint uns die Suche nach einer *Ordnung* des sozialen Seins und Werdens als ein durchaus sinnvolles Beginnen. Wir meinen auch, daß die Problemstellung der marxistischen Sozialphilosophie eine fruchtbare und daß im einzelnen vieles richtig gesehen ist. Ob man dahin kommen wird, diese Ordnung in einem Kodex von *Gezetzen* der gesellschaftlichen Entwicklung begrifflich zu erfassen, ob es gelingen wird, aus solchen Gesetzen den Gang der Geschichte wirklich begreifbar zu machen oder ob dabei andere kategoriale Formen der gedanklichen Reproduktion eine wichtigere Rolle zu spielen haben [30] – das alles sollte vorerst eine

offene Frage bleiben. Um zu einer tragfähigen Lehre von der Determination des menschlich-gesellschaftlichen Daseins zu gelangen, ist jedenfalls noch ein weiter Weg zurückzulegen und manches Mißverständnis zu beseitigen.

ANMERKUNGEN

1. "Für uns, die den Sozialismus aufbauen, ist die objektive Gesetzmäßigkeit in der Entwicklung der menschlichen Gesellschaft eine besonders erfreuliche Tatsache. Auf Grund dieser Gesetzmäßigkeit wissen wir: Ebenso, wie unvermeidlich, gesetzmäßig nach dem Winter der Frühling und nach dem Frühling der Sommer kommt,... ebenso gesetzmäßig unvermeidlich löst eine Gesellschaftsformation die andere ab, entwickelt sich die Gesellschaft von der Urgemeinschaft zur Sklavenhaltergesellschaft, von ihr zur Feudalherrschaft, von dieser zur kapitalistischen Gesellschaft, und die kapitalistische Gesellschaft wird schließlich vom Kommunismus abgelöst." N. Janzen, *Die Dialektik und ihre Bedeutung für den Aufbau des Sozialismus*, Sonderbeilage zur *Presse der Sowjet-union*, Nr. 107, *Moskau:* 12. September 1958.
2. Hervorzuheben sind die Arbeiten von V. P. Tugarinov, V. M. Kovalgin, Ž. Tulenov, G. E. Glezerman, K. S. Šarija, G. A. Svečnikov, Ju. P. Sačkov, I. T. Frolov, S. B. Moročnik, D. I. Širokanov, S. T. Meljuchin und die Kollektivarbeiten über das Kausalproblem in Physik und Biologie. Siehe SOVIETICA-Bibliographie.
3. *Osnovy marksizma-leninizma*, 1959, S. 61–62, S. 138.
4. *Ibidem*, S. 138.
5. Wir schließen uns hier der Darstellung in den *Osnovy marksizma-leninizma*, S. 138–145 an.
6. *Kategorien der materialistischen Dialektik*, (herausgegeben von M. M. Rosental und G. M. Schtraks), 1959 (russische Ausgabe 1956), S. 203–204.
7. *Osnovy marksistskoj filosofii*, 2. Auflage 1962, S. 318.
8. *Ibidem*, S. 314–316. Am ausführlichsten behandelt das Problem der allgemeinen und speziellen Gesetze K. S. Šarija, *K voprosu o sootnošenii obščich i specifičeskich zakonov obščestvennogo razvitija*, 1960.
9. G. E. Glezerman, *O zakonach obščestvennogo razvitija*, 1960, S. 148.
10. Besonders deutlich hat V. P. Tugarinov die Relationalität der Gesetze herausgestellt. Er spricht zwar auch vom 'Wirken' der Gesetze, er hat aber sehr scharf dagegen Stellung genommen, daß man den Begriff der 'Herrschaft' auf Beziehungen zwischen Gesetzen anwandte. Vgl. *Sootnošenie kategorij istoričeskogo materializma*, 1958, S. 27.
11. Auch darauf hat V. P. Tugarinov, der für größere Sorgfalt in semantischen Dingen plädiert, hingewiesen. Vgl. *Sootnošenie kategorij dialektičeskogo materializma*, 1956, S. 105. Ebenso darauf, daß manche Gesetze des gesellschaftlichen Lebens ein finales *(celevoj)* Moment involvieren. *Ibidem*, S. 11.
12. Das Problem der inneren Konstitution von Gesetzen kommt bei S. T. Meljuchin in einigen seiner Aspekte zur Geltung. Er hat in allgemeiner Form darauf aufmerksam gemacht, daß Gesetze einer Analyse ihrer inneren Begründung bedürfen (in der Kollektivarbeit *Problema pričinnosti v sovremennoj fizike*, 1960, S. 252–253). Er hat die Fundierung von Gesetzen der Makroprozesse in denen der Mikroprozesse konstatiert *(O dialektike razvitija neorganičeskoj prirody*, 1960, S. 221–223) und

gelegentlich auch bemerkt, daß die Mehrzahl der sozialen Gesetze dem Typus der statistischen Gesetze zuzurechnen seien *(Ibidem,* S. 217).

13. Z.B. G.M. Štraks in seinem Beitrag zum Sammelband *Kategorii materialističeskoj dialektiki.* Vgl. deutsche Ausgabe *(Kategorien der materialistischen Dialektik,* 1959) S. 203–204.
14. *Herrn Eugen Dührings Umwälzung der Wissenschaft,* 1953, S. 138.
15. *Ibidem,* S. 351.
16. 2. Auflage, S. 320.
17. *Ibidem,* S. 321.
18. G. E. Glezerman, *O zakonach obščestvennogo razvitija,* S. 105.
19. S. 456.
20. Kapitel XIV, 7.
21. S. 449–451.
22. Karl Marx, Friedrich Engels, *Werke,* Bd. 1, 1958, S. 385.
23. Karl Marx, Friedrich Engels, *Werke,* Bd. 3, 1958, S. 35.
24. G. E. Glezerman umschreibt die 'Notwendigkeit des Sozialismus' mit folgenden Worten: "Was bedeutet nach marxistischer Ansicht die objektive Notwendigkeit des Sozialismus? Sie bedeutet, daß sich der Kapitalismus überlebt hat, daß er zum Bremsklotz der Geschichte geworden ist, daß die Entwicklung der materiellen Lebensverhältnisse die Menschen vor die Aufgabe gestellt hat, ihre Produktionsverhältnisse zu ändern, sie in Übereinstimmung mit den neuen Produktivkräften zu bringen, die bereits über den Rahmen des Kapitalismus hinausgewachsen sind. Die Entwicklung des Kapitalismus hat auch eine solche Klasse hervorgebracht wie das Proletariat, das infolge seiner objektiven Lage im Kapitalismus gezwungen ist, gegen die Bourgeoisie, für den Sozialismus zu kämpfen, da es auf andere Weise seine Befreiung nicht erlangen kann". *(O zakonach obščestvennogo razvitija,* S. 92).
25. *Werke,* Bd. 1, S. 385.
26. *Osnovy marksistskoj filosofii,* 2. Aufl., S. 313.
27. *Ibidem,* S. 314.
28. *Osnovy marksizma-leninizma,* S. 145.
29. Gegen das verbreitete Vorurteil, der Histomat schließe eine wertbezogene Betrachtung sozialer Phänomene aus (vgl. K. Boržeanu in *FN* 1959, 3), trat V. P. Tugarinov mit seiner Schrift über die Werte des Lebens und der Kultur auf, in der er die Umrisse einer marxistisch-leninistischen Axiologie entwickelt. Vgl. die Rezension dieser Schrift in Volume 2, 1962, p. 72–75 dieser Zeitschrift.
30. Die Abhängigkeit des historischen Gestaltens von den 'vorgefundenen' (größtenteils von vorausgegangenen Generationen ererbten) materiellen und ideellen 'Bedingungen' dürfte zu komplexer Natur sein, als daß man sie in prägnante Gesetzesformeln fassen könnte. Es bedarf sicherlich eines äußerst elastischen Systems von Determinationskategorien, um der beträchtlichen Variationsbreite möglicher historischer Gestaltung gerecht zu werden.

DAVID DINSMORE COMEY

A POSITIVIST AMONG THE DIALECTICIANS [1]

In March, 1962, the English philosopher A. J. Ayer, Wykeham Professor of Logic at Oxford University, visited the Soviet Union to give a series of lectures. A few months previous to his visit, an article by him on the relationship between philosophy and science had been published in *Voprosy Filosofii*. Both these events were significant, since it was the first time that any major representative of contemporary philosophy as practiced in the Anglo-Saxon world had been invited to set his views before the Soviet philosophical public.

The article and the lectures produced a considerable reaction among Soviet philosophers and ideologists, the highlights of which are described in what follows. An examination of the reaction gives some idea of the various trends at work today in Soviet philosophical circles.

I

Although Ayer is not a leading practitioner of 'Oxford philosophy', an avant-garde type of linguistic analysis, it was probably a happy choice that he was the first representative of contemporary Anglo-Saxon philosophy to gain a live audience in the Soviet Union. Not only is Ayer's modified form of logical positivism an historical precursor of contemporary linguistic analysis (and thus provides Soviet philosophers with a chronologically correct introduction should they choose to continue their first-hand study of it), but Ayer's admirable clarity and personality probably resulted in a more effective presentation than any more avant-garde Oxonian colleague could have made. The subtle niceties of English linguistic analysis do not seem to survive translation into other languages, a fact which may partially account for its lack of adherents on the Continent. If the Soviet philosophers ever do come to have an understanding of this type of philosophy, it will probably be based on a prior understanding of the philosophical approach which Ayer presented to them in his lectures.

Studies in Soviet Thought II, 3 (September 1962) © *D. Reidel, Dordrecht–Holland.*

When this writer discussed the lecture trip with Ayer shortly before Ayer left for the Soviet Union, Ayer modestly attributed his having been invited to the fact that he had met a number of Soviet philosophers at the XII International Congress of Philosophy in Venice in 1958, and they had found that they could converse in spite of their professional differences. As a result of these conversations, Ayer was invited to submit an article, on a topic of his own choosing, to *Voprosy Filosofii* [*VF*]. He proceeded to write the essay on "Philosophy and Science", but it was not published until the January issue of 1962. Shortly thereafter came the invitation from the Dean of the Faculty of Philosophy at Moscow State University to give a series of lectures there.

Ayer visited the Soviet Union for nine days and gave five lectures, and held several informal discussions with small groups of philosophy professors. Four of the lectures were delivered at Moscow State University: (1) "The Concept of a Person", which examined the mind-body problem on the basis of P. F. Strawson's theories [2]; (2) "Contemporary British Philosophy", which dealt with the work of Ludwig Wittgenstein, John Wisdom, Gilbert Ryle and John A. Austin; (3) "Pragmatism", beginning with C. S. Peirce and continuing up to the present; and (4) "Truth", which defended a version of the semantic theory. The latter was repeated as the single lecture which Ayer gave at Leningrad State University.

Since Ayer does not speak Russian, the procedure at the lectures was that a Russian translation of the lecture would be read by a professor or interpreter, and then Ayer would answer written questions handed up to him from the audience. Then several Russian professors would make speeches replying to Ayer, and Ayer would in turn reply to them. The result of this elaborate procedure was that the sessions were rather long: in the case of the mind-body lecture, the session ran over four hours.

Ayer found the students' questions invariably sought to elicit more information rather than to raise objections to anything which he had said. Many of these questions moved far afield from the lecture topic, and one subject on which he was repeatedly questioned was English moral philosophy, a field with which some of the students were surprisingly familiar.

The professors' papers, read in reply to Ayer's lectures, kept more closely to the lecture topic and were always polite even when criticizing Ayer's

ideas. Ayer had the impression that the Russians were anxious to show that their differences could be bridged, and so they chose to emphasize points of common agreement rather than disagreement.

One area of disagreement, however, concerned the contention that the processes of nature follow the laws of the dialectic. When Ayer asked for an example of such a law, the best that the Soviet philosophers could offer was that everything is in a constant state of change, and when Ayer pressed them for an interpretation of this proposition, their answer seemed to be little more than a restatement of the fact that we live in a world in which things happen, which, as Ayer put it, is a "truism that only some very wild metaphysicians would wish to deny".

Ayer soon discovered that what the Soviets mean by 'materialism' is what most Western philosophers mean by 'realism': physical objects exist independently of our awareness of them, and they are not in any sense 'reducible' to sense-data. This sort of 'realism', of course, is widely accepted in Anglo-Saxon philosophy today. 'Materialism' in the Anglo-Saxon sense (the identification of mental events with physical processes in the brain) was something which the Soviet philosophers shied away from. They were not prepared to accept Ryle's attempts to 'eliminate the Ghost in the Machine', and one objection raised against Ayer's treatment of the mind-body problem was that it was 'excessively materialistic': the Soviets felt that Ayer had underplayed the causal rôle of mind.

Another area of disagreement was Lenin's epistemological 'reflection theory'. In Ayer's lecture on "Truth", he tried to show that if the doctrine were taken seriously, as implying some pictorial or structural correspondence between thought and reality, then it could not possibly be defended. However, if all that was meant was that the facts are often what we think them to be, then the theory was true but not very exciting, and to talk of 'reflection' here was rather misleading. The official reply to Ayer's analysis was that he had failed to fully understand the concept of 'reflection', although no satisfactory explanation was ever given. However, Ayer seemed to think that his argument was favorably received by some of the younger students in his audience, whom he found to be more receptive to new ideas and more flexible in their thinking than the older generation.

At the termination of Ayer's visit, the Soviets expressed the hope that he would continue to write for *VF,* and indicated that they would welcome

invitations to contribute in turn to English philosophical journals and to lecture at English universities. On this hopeful note Ayer's visit came to a close: it had obviously been a friendly and fruitful exchange for all concerned.

II

Unfortunately, part of the ensuing reappraisal of Ayer's visit assumed a distinctly negative character. A little over a month after Ayer's visit had taken place, an unsigned editorial entitled "Peaceful Coexistence Does Not Mean Relaxation of the Ideological Struggle" appeared in the Communist Party's ideological journal *Kommunist*.[3] As a prime example of the dangers involved in letting alien ideological views circulate without adequate refutation, *Kommunist* cited Ayer's article, and blamed the editors of *VF* for not sufficiently refuting Ayer's views; instead "the editors sought to give him as many flattering epithets as possible. He was a 'prominent representative', 'has given lectures in many countries of the world', 'his name is widely known', and his article 'is written in a lively fashion' and 'important and interesting' questions are raised in it." [4] *Kommunist* evidently would have preferred some good old-fashioned Stalinist epithets for Ayer, and criticized the editors of *VF* for their timidity: "Our philosophical journal did not give deserving rebukes to Ayer's speculative constructions, whose bankruptcy is clear. Even in the case that one takes as a basis for a definition of science those criteria presupposed by Ayer (the ability to make predictions and the possibility of verification in experience), then the profound rightness and genuine scientific character of Marxist-Leninist philosophy is obvious!" [5] After giving the usual examples of such 'verifications' of Marxism-Leninism, *Kommunist* continued: "All these are facts of living life, in contact with which the conceptions of Ayer crumble like a house of cards. That the bourgeois ideologue 'ignored' them in his vain attempts to 'prove the unprovability' of the basic conditions of philosophical science, can be understood if one considers his initial lofty position. But it is impossible to understand why the journal *Voprosy Filosofii* did not resort to these convincing, vital facts in its polemic with Ayer. Instead, the journal got into a very flaccid academic argument with him, in the course of which the internal contradiction and eclecticism of Ayer's arguments were not

revealed." [6] "The journal *Voprosy Filosofii* in this case was not able to give a decisive rebuff to neopositivism. This blunder is all the more annoying in that *Voprosy Filosofii* has no little positive experience in criticizing bourgeois philosophy..." [7]

Although this sort of negative reaction probably was to be expected from the rather negative editorial board of *Kommunist,* such a condemnation by the chief ideological organ of the CPSU could not be ignored: *VF* obviously would have indulge in some *samokritika* (self-criticism). Yet when the *samokritika* dutifully appeared in *VF* a month later, it was surprisingly self-restrained. In a lead editorial entitled "Criticism of Contemporary Bourgeois Philosophy: An Important Task of the Ideological Struggle",[8] the editors of *VF* wasted relatively little space condemning their 'error' on Ayer. Only at the end did they specifically mention Ayer, saying: "As soon as the editorial board gave A. Ayer the opportunity of writing in the journal from the position of neopositivism, it should have subjected Ayer's views to a more severe criticism, unmasking before Soviet and foreign readers the uselessness, internal contradictions, and eclecticism of his opinions." [9] The remainder of the editorial was a scathing criticism of contemporary Western philosophy in general.[10]

In a separate unsigned report entitled 'Professor A. Ayer in Moscow and in His Own Home",[11] the editors of *VF* pointed out that while they regarded Ayer's visit as an important step in establishing contact with Western philosophers, they resented some of the remarks which Ayer had made in the "English bourgeois press", particularly a reference that had been made to his trip as "breaching the dialectical curtain". [12] The editors of *VF* pointed out that Ayer himself had been surprised at the extent to which some of the younger Soviet philosophers had been familiar with Western works, both in the original and in the Russian translations of certain books of Russell, Wittgenstein, Carnap and Philipp Frank.[13] On the other hand, as *VF* pointed out, "in his conversation with the editorial board of the journal *Voprosy Filosofii* Ayer acknowledged that 'the majority of English philosophers are completely unacquainted with the developments in the field of philosophy which have taken place in the Soviet Union in recent years, and as a matter of fact, they know nothing about Marxist theory and the application of Marxist theory in the field of science'. Does this not make plain from which side a

curtain has arisen and where the screens and barriers should be torn down?" [14]

It is true that there is a considerable lack of knowledge about Soviet philosophy in the West, and this is one of the reasons why the *Sovietica* series and *Studies in Soviet Thought* were founded. However, the reasons for this lack of Western knowledge about Soviet philosophy are not because an ideological 'curtain' has been drawn which prevents Westerners from studying Soviet philosophy if they want to. Rather, the reasons lie in the difficulty of learning Russian (a *sine qua non* for such study, since the Soviets almost never publish their philosophical writings in Western languages), as well as the lingering memory of the sterility of Soviet philosophy during the Stalinist era. The lack of Western study of Soviet philosophy is not because of political pressure, but rather because of a regrettable antipathy and lack of interest. In the Soviet Union, the 'curtain' exists less because of lack of interest than because of restrictions on importing Western periodicals and books, plus the omnipresent ideological pressure of having to denounce Western philosophy as a 'tool of reactionary imperialism'. Until this relatively crude approach disappears, the 'curtain' will remain on both sides. Genuinely free critical study of Western philosophy will not flourish in the Soviet Union, and Western philosophers will continue to feel that their Soviet colleagues have nothing worthwhile to say to them.

III

The positive criticism of Ayer's views appeared in two articles, one by I. V. Kuznecov entitled "No! Philosophy is a Science" which accompanied Ayer's article in the January 1962 issue of *VF* [15], the other by B. M. Kedrov, entitled "Philosophy as a General Science", which appeared a few months later.[16] Both Kuznecov's and Kedrov's articles are detailed replies to Ayer and each runs three times the length of Ayer's article.

In his own article, Ayer had stated that he did not think philosophy was a science, because (1) its theories do not allow predictions to be made from them, and (2) its theories cannot be proved or refuted by experience, as is the case with scientific theories. Ayer also suggested that the principles of the dialectics were not scientific laws: because they were interpreted in

such a way that nothing could conceivably refute them, they had no empirical content.

Kuznecov wrote a reply to these theses which was quite temperate and even incorporated a wide range of scientific examples – in short, a considerable improvement over most of his past writings. Kuznecov began by admitting that philosophy is not like one of the natural sciences: it does not have its own experimental equipment such as a 'philosophical Wilson cloud chamber'.[17] Instead, he argued, philosophy does not need experiments of its own, because it incorporates within itself the results of the other sciences, which *are* based on experiments.[18] This also means that philosophy can never find itself in contradiction with science, since it is based on it.[19]

Kuznecov also argued that philosophical theories are verified and refuted by experience, and cited as an example of the latter the case of the philosophers of the seventeenth and eighteenth centuries who stated that space and time were separate entities and, according to Kuznecov, were proved wrong by the theory of relativity.[20] He stated that recent data about higher nervous activity, medicine and cybernetics all verify the Marxist-Leninist theory that consciousness is a characteristic of matter organized in a special way.

Similarly Kuznecov disputed Ayer's contention that philosophical theories do not serve as predictions, and cited as an example the Greek philosophers' belief in the atomic structure of matter. He also considered Lenin's remark in 1908 that the electron was inexhaustible and that matter was "infinite in depth" to have been a prediction of the new sub-nuclear particles. Likewise Lenin's remark that *all* matter possesses the special characteristic of reflection was a prediction verified by contemporary cybernetics. Against the possible objection that these were not really predictions, Kuznecov argued that although they were not 'exact' predictions like Mendeleev's predictions of undiscovered elements, nevertheless they were predictions of a generalized sort.

The natural objection which most Anglo-Saxon philosophers would make to this is that it empties the word 'prediction' of its real value, and makes *any* statement about the future a prediction. The recent analyses of 'prediction', 'postdiction' and 'retrodiction' [21] are too complicated to be presented here, but a few remarks can be made. Some predictions, particularly negative ones, do not have to be very specific in order to be

scientifically useful: the information that an astronaut will not find lethal radiation on the moon is probably more valuable than any positive prediction of what he will find. Again, predictions about metal fatigue, although restricted to a range of parameters rather than any specific future event, are valuable in engineering safety for airplanes, bridges, etc. But the statement that you, as a human being, are going to die, is hardly a prediction; even an existentialist, who works up more concern for this statement than normal human beings, would probably seek to have some specific date or time-range added to the statement before accepting it as a *prediction*. And as for Lenin's statement that "matter is infinite in depth", it takes a generous mind indeed to accept this as a prediction of the elementary particles like the pions and muons. The more vague and ambiguous a statement about the future is, and the more it allows of incompatible interpretations, the less it can qualify as a scientific prediction; and since Kuznecov is concerned to show that philosophy is a science, the philosophical statements which he wants to submit as predictions must measure up to the criteria of exactness and determinacy which we ask of a prediction before we regard it as being 'scientific'. None of the examples given by Kuznecov come any closer to fulfilling these criteria than the 'predictions' of the Delphic oracle.

Kuznecov criticized Ayer for saying that pure mathematics is independent of experience, and cited as a counter-example the impetus which quantum mechanics gave to the development of tensor analysis.[22] But Kuznecov committed the old mistake of confusing applied mathematics with pure mathematics. The verification of the physical theory of relativity has similarly led to further research on non-Euclidean geometries. But the fact of whether or not the *physical* geometry of space is Riemannian or Lobachevskian is quite independent of the 'truth' (i.e., internal consistency) of these theories when taken as pure theoretical systems. If the Marxist-Leninist doctrine that pure mathematics necessarily depends on experience for its development were true, then Lobachevsky would never have developed his geometry, for our human perceptual experience is totally Euclidean; and Einstein would not have been able to take the already developed, pure non-Euclidean geometry and apply it to his physical theory.

Kuznecov agreed with Ayer's critique of teleological principles as vacuous, but disagreed with his similar appraisal of the principle of

causality.[23] Ayer had said that because of the way the principle was interpreted, no phenomena could possibly refute it: it excluded nothing. The 'counter-examples' which Kuznecov gave were not very clear; he stated that the principle excluded the possibility of an 'effect' preceding a 'cause', although he failed to give a further analysis of what such a rather baffling situation would involve, e.g., what it would mean to say of an event E_1 that it was an 'effect' which was 'caused' by a later event E_2.[24] Nor did Kuznecov discuss the position which most Western scientists now take regarding the principle: namely that it is not a law, but a working hypothesis or a rule of investigation. That is, it is no longer regarded as a statement of fact ("Every event has a cause") since it is hard to imagine just what a disconfirming example would be, but rather as a methodological directive ("Even if no causal factor has yet been discovered for the event, keep searching for it on the assumption that one exists"). Most Western scientists, however, would agree completely with Kuznecov on the great heuristic value of the principle. In general, Kuznecov's insistence on the universality of the causality principle, and his denial that quantum phenomena undermine the principle, ironically reminds one of Einstein's views – and at least a decade ago, Einstein was hardly a philosopher with whom Kuznecov sympathized.[25]

Kedrov began his article on "Philosophy as a General Science" by examining what the basic features of a science are. He admitted that Ayer's criteria of prediction and verification were important, but regarded them as secondary to the most basic feature of science, namely the discovery of objective laws. Kedrov traced the long history of how each of the sciences, beginning with astronomy and physics, and terminating with psychology and logic, branched off from philosophy and became separate sciences. These were progressive and not negative steps, and did not show that philosophy was pre-scientific, but simply that each of these fields had gradually discovered laws more specific than those of philosophy, and therefore became separate sciences. Kedrov indicated that until knowledge is codified into laws, it is not scientific. Lest this be used as an argument that philosophy is not a science, he went on to say that philosophy discovers and investigates laws also, but that these laws are very general and cover all phenomena, not just the specific events investigated by the individual sciences.

Ayer had doubted whether such general laws had any factual content,

but according to Kedrov, this showed that Ayer had not understood the dialectical method.[26] Kedrov defended the generalized concepts used in such laws, although admitting that the more abstract such concepts became, the more they tended to lack content; as an historical example of a completely broad and useless concept, he cited 'matter as essence'.[27] Yet as an example of a 'philosophical law', he picked Heraclitus' "everything flows", and claimed that the discoveries of such scientists as Mendeleev and Rutherford had proved the heuristic value of this 'law'! [28] A far better example which Kedrov then chose was the principle of the conservation of energy; as he pointed out, this principle did not lead to any specific predictions or discoveries, and yet it has had considerable heuristic value.[29] The only difficulty with this is that the principle of the conservation of energy has always been regarded as a physical principle, not a philosophical one, so that this example has less significance for his argument than Kedrov realized.

In both Kuznecov's and Kedrov's articles, there was a rather striking assumption that although laws differed in content from science to science, nevertheless the rôle of laws in science was a clear-cut and easily identified one.[30] Kedrov did briefly discuss the problem of distinguishing 'genuine' laws from 'non-genuine' ones;[31] in spite of his emphasis that the discovery of laws is the central problem of science, he passed over a great many questions which can be raised about the way in which he used the expression 'scientific law'. For example, the relationships and differences between 'law', 'principle', 'hypothesis', and 'theory' were virtually ignored by Kedrov. These terms are often confused in science, and often one finds a scientist referring to the very same formula as a 'principle', 'theory', or 'law', as in: The Law of Gravitational Attraction. Kedrov and Kuznecov used the word 'law' in an extremely broad fashion; much of their usage does not correspond to exact scientific usage at its best. Scientists try to reserve the term 'law' for experimental laws like Galileo's Law of Free Fall, Boyle's Law; Kedrov's usage of 'law' would extend to what scientists prefer to call 'theories': sets of equations and statements containing descriptive terms not necessarily having meanings fixed by definite experimental procedures. Space does not suffice to cite the numerous reasons why the concept of law should not be loosely used to include theories as well as experimental laws; however, it is well known that to ignore these reasons is to invite confusion. Inattention to these

differences often leads Soviet philosophers of science to postulate a simplified view of scientific methodology which really bears little resemblance to the actual facts of science; a case in point is Kedrov's slim description of laws and hypotheses.[32] Moreover, Kedrov and Kuznecov both ignore the fact that the same formula, which sometimes acts as a law, can also serve a number of distinct other purposes within a science: for instance, $F = m(d^2s/dt^2)$ sometimes serves as a *definition* of 'force' in mechanics, sometimes as a *law,* sometimes as a *computation rule* of how force is to be measured.[33] Again, the whole question of the accuracy of laws and the rôle of scientific approximation is left untouched by Kedrov; a very good case can be made for the essential *inaccuracy* of physical laws.[34] For instance, one important problem which has not as yet been treated by Soviet philosophers is the question of 'idealized laws'. To take a simple example, there is a law which states that the period of a simple pendulum oscillating through a small arc is proportional to the square root of its length. A pendulum one meter long thus has a period half that of a pendulum four meters long. The law is asserted on the basis of the assumption that the weight of the line supporting the oscillating bob is negligible, and that air-resistance or friction at the point of suspension are so negligible that they can be ignored. Yet as an experimental fact, no simple pendulum ever actually behaves exactly as the law predicts: the law is a deliberate 'idealization' of what really takes place.

No doubt this would be considered as rank 'idealism' by Soviet philosophers; yet their own epistemological doctrine of 'reflection', if taken literally, would lead them into the impasse of maintaining that if laws really describe what 'objectively' takes place, then every law would have to be cast in a statistical rather than a universal form. Another example is Galileo's Law of Free Fall, of which Kedrov says: "It states a generalization of all the cases which have already taken place and all the cases which under the given conditions can happen and will happen in the future." [35] Yet Galileo's law is *not* a correlation of the observed data, for there is only a high correlation and not an invariable proportionality between the lapsed times and the distances which various bodies fall; a *generalization* of the observed data would have to be statistical in form, and not 'universal' and 'infinite' as Kedrov says.

There is a relatively simple move which can be made to counter this argument, but it depends on a philosophical analysis of observational data

and laws which does not seem to be open to those who espouse the Leninist theory of 'reflection'. If one takes the latter seriously, then there are numerous difficulties in accounting for the widespread rôle played in science by limit concepts and ideal concepts such as 'instantaneous velocity', 'perfect elasticity', 'infinitely slow expansion', etc. Soviet philosophers, although claiming that Marxist-Leninist dialectical materialism is 'scientific' and gives an accurate view of scientific reasoning, have not even begun to scratch the surface of most of the real problems raised by contemporary philosophy of science. One wonders whether or not the constant perpetuation of certain statements from the 'classics' of Engels and Lenin has not made Soviet philosophers insensitive or oblivious to these problems, but in any event they do not seem to have reached a level of sophistication in giving an account of scientific methodology which would bear out any of their claims to completeness in this field. For a philosophy which constantly proclaims its scientific character, dialectical materialism is curiously out of contact with much of modern science.

Both Kuznecov and Kedrov defended determinism and the relevance of the principle of causality for quantum phenomena,[36] but the defence lacked scientific detail. Kedrov correctly maintained that if by 'determinism' one means the Laplacean determinism of classical mechanics, then quantum phenomena are not 'deterministic' in this sense. Kedrov argued for a wider interpretation of determinism which would include quantum phenomena; unfortunately he did not discuss the matter other than to say that Einstein, Schrödinger and others have had their doubts about the finality of any account of quantum phenomena which is not ultimately a causal account. Kedrov left unmentioned the so-called 'causal interpretations' of quantum phenomena by Louis de Broglie, Jean-Pierre Vigier and David Bohm, although their work has been translated into Russian.[37]

A far more effective argument open to Kedrov and other Soviet philosophers anxious to preserve the principle of causality even in subatomic physics would be the following. The state variables of theoretical mechanics are instantaneous positions and momenta, and it has been widely assumed that all deterministic theories must use mechanical state-descriptions. However, there are a wide number of alternative ways to specify the state of a physical system, such as state-descriptions in terms of values of variables at several different times or in terms of their values

during some temporal interval. Another alternative, which is the one used by classical statistical mechanics and modern quantum theory, is to define the state-description in terms of values of a variable standing for a statistical property of some class of objects rather than a property significantly predicated of individuals only.

Under this interpretation, a theory is deterministic relative to the state-description used by the theory: and it is deterministic if, given the values of its state variable for some particular period, the theory logically determines a unique set of values for those variables for any other period of time. Although quantum theory is not deterministic with respect to a state-description defined in terms of positions and momenta as the state variables, nevertheless it *is* deterministic with respect to the state-description defined by the ψ-function, the square of whose amplitude is a probability distribution function. Under the interpretation given to the principle of causality in Western philosophy of science as a methodological *directive* rather than as a *law,* the claim that the causality principle does not apply to quantum mechanics is acceptable only if one interprets the principle as legislating the use of a particular type of state-descriptions and excluding statistical state variables from them. However, because Soviet philosophers may not adopt this view due to their commitment to the belief that the causality principle is a law of the dialectic rather than a scientific methodological directive, they seem to lack any viable argument for the applicability of determinism to quantum phenomena, much as they would like to defend the latter view. This is only one more of many possible examples of the way in which the unquestioning commitment to a somewhat dubious nineteenth century dogma prevents Soviet philosophers from making an adequate defense of what they ultimately wish to prove.

If Kedrov and Kuznecov had been willing to take these problems up in their discussion, their arguments for the central rôle of laws might have been stronger. However, one has the feeling that the advanced research in this sector which has been going on among American philosophers of science is unfamiliar to Soviet philosophers. Although the Soviet philosophers might not always agree with all of the conclusions reached (despite the fact that much of the current of contemporary American philosophy of science is running against the positivists), their own discussions in this area would be considerably clarified if they were aware of

more of the problems which have recently been raised. As it stands, both Kuznecov's and Kedrov's articles remain rather vague and naïve; one can sympathize with their anti-phenomenalistic, realist approach, but their arguments leave much to be desired, particularly when they fall back on dialectics.

Both Kedrov and Kuznecov concluded that Ayer had contradicted himself by stating that philosophy was not a science but simultaneously urging that philosophers analyze such problems as induction, the relationship of consciousness to matter, etc.[38] Although this writer understands what Ayer had in mind, he must confess that he would like to see the 'contradiction' clarified and resolved if and when Ayer makes another contribution to *Voprosy Filosofii*. It is to be hoped that such contributions and further lecture trips by good Western philosophers will be forthcoming, for they may serve to provide Soviet philosophers with the necessary stimulus to investigate and give substantial criticisms of advanced Western work in the philosophy of science, as well as make some contributions to philosophy of science of their own.

The indiscriminate rejection of Western philosophy exemplified by the crude quotations cited in the second part of the present article serves no useful purpose; the critical approach taken by Kuznecov and Kedrov was a step in the right direction. When this latter approach is combined with a real knowledge of analytic philosophy and philosophy of science, it will undoubtedly merit the serious attention of Western philosophers.

REFERENCES

1. This article was written while the author was the recipient of a research grant from the Ford Foundation. In acknowledging his thanks, he would like to point out that the conclusions and opinions expressed in the article are entirely his own and not necessarily shared by the Ford Foundation.
2. Cf. P. F. Strawson, *Individuals*, Methuen, London, 1959; and: Persons, *Minnesota Studies in the Philosophy of Science*, University of Minnesota Press, Minneapolis, 1958, Vol. 2, 330–353.
3. Mirnoe sosuščestvovanie ne označaet oslablenija ideologičeskoj bor'by, *Kommunist*, 1962, 8, 60–68. (For a further account of other criticisms in the editorial, see the note on p. 228 of this issue of *SST*).*
4. *Ibid.*, 63.
5. *Ibid.*, 64.
6. *Ibid.*, 64.
7. *Ibid.*, 65.

8. Kritika sovremennoj buržuaznoj filosofii – važnaja zadača ideologičeskoj bor'by, *VF* 1962, 6, 3–13.
9. *Ibid.*, 12–13.
10. For further information on the content of the editorial, see the note on p. XXX of this issue of SST.
11. Professor A. Ajer v Moskve i u sebja doma, *VF* 1962, 5, 155–156.*
12. *The Observer*, April 8, 1962.
13. The works mentioned are: Bertrand Russell, *Čelovečeskoe poznanie. Ego sfera i granicy* (Human Knowledge: Its Scope and Limits), (translated by N. V. Vorob'ev, edited by E. Kol'man), Izdatel'stvo inostrannoj literatury, Moscow [IIL M.,], 1957; Bertrand Russell, *Istorija zapadnoj filosofii* (History of Western Philosophy), (an abbreviated translation edited by V. F. Asmus), IIL, Moscow, 1959; Ludwig Wittgenstein, *Logiko-filosofskij traktat* (Tractatus Logico-Philosophicus), (translated by I. Dobronravov and D. Laxuti, edited by V. F. Asmus), IIL, Moscow 1958; Rudolf Carnap, *Značenie i neobxodimost'* (Meaning and Necessity), (translated by N. V. Vorob'ev, edited by D. A. Bočvar, with introduction by S. A. Janovskaja), IIL, Moscow, 1959; Philipp Frank, *Filosofija nauki* (Philosophy of Science), (edited by G. A. Kursanov), IIL, Moscow, 1960.
14. *VF* 1962, 5, 155.
15. Net! Filosofija – éto nauka, *VF* 1962, 1, 106–122.*
16. Filosofija ka obščaja nauka, *VF* 1962, 5, 44–58, and *VF* 1962, 6, 48–62.
17. *VF* 1962, 1, 106.
18. *Ibid.*, 108.
19. *Ibid.*, 107.
20. *Ibid.*, 107.
21. Cf. Israel Scheffler, Explanation, Prediction and Abstraction, *British Journal for the Philosophy of Science (BJPS)*, Vol. 7, No. 28, 1957, 293–309; F. A. Hayek, Degrees of Explanation, *BJPS*, Vol. 6, No. 23, 1955, 209–225; Nicholas Rescher, On Prediction and Explanation, *BJPS*, Vol. 8, No. 32, 1958, 281–290.
22. *VF* 1962, 1, 108.
23. *Ibid.*, 113–114.
24. For a philosophical discussion of this situation, cf. Max Black, Why Cannot an Effect Precede Its Cause?, *Analysis*, Vol. 16, 1955, 49–58. (Reprinted in Max Black, *Models and Metaphor* Cornell University Press, Ithaca, 1962, pp. 170–181). For criticisms of Black's position and further discussions, see the articles by Antony Flew, *Analysis*, Vol. 16, 1955, 104–111; by Michael Scriven, *Analysis*, Vol. 17, 1956, 5–9; by D. F. Pears, *Analysis*, Vol. 17, 1956, 54–63; by Roderick Chisholm, Richard Taylor and William Dray, *Analysis*, Vol. 20, 1959, 73–81.
25. For examples of Kuznecov's earlier negative views on Einstein, see his "Sovetskaja fizika i dialektičeskij materializm" (Soviet Physics and Dialectical Materialism) in *Filosofskie Voprosy Sovremennoj Fiziki* (Philosophical Problems of Contemporary Physics), Izd. AN SSSR, Moscow, 1952, pp. 31–86; and "Protiv idealističeskix izvraščenii ponjatii massy i energii" (Against the Idealistic Distortions of the Concept of Mass and Energy), *Uspexi Fizičeskix Nauk* 1952, t. 48, 221–262.
26. *VF* 1962, 5, 58.
27. *VF* 1962, 6, 49.
28. *Ibid.*, 53–55.
29. *Ibid.*, 55–57.
30. *VF* 1962, 1, 109; *VF* 1962, 5, 45–46, 48.

31. *VF* 1962, 5, 50.
32. *Ibid.*, 48.
33. For a good discussion of these various rôles, cf. Norwood Russell Hanson, *Patterns of Discovery*, Cambridge University Press, 1958, pp. 99–105, 112–118.
34. Such a case has been made in Michael Scriven, The Key Property of Physical Laws – Inaccuracy, *Current Issues in the Philosophy of Science*, (ed. by Herbert Feigl and Grover Maxwell), Holt, Rinehart and Winston, New York, 1961, 91–101.
35. *VF* 1962, 5, 49.
36. *VF* 1962, 1, 114; *VF* 1962, 6, 51–52.
37. Articles by Vigier and De Broglie have appeared in *VF:* cf. De Broglie, Ostanetsja li kvantovaja mexanika indeterministskoj? (Is Quantum Mechanics Still Indeterministic?), *VF* 1954, 4, 105–118; De Broglie, Interpretacija vol'novoj mexaniki (The Interpretation of Wave Mechanics), *VF* 1956, 6, 80–90; Vigier, K voprosu o teorii povedenija individual'nyx mikroob'ektov (On the Question of a Theory of Behavior for Individual Micro-Objects), *VF* 1956, 6, 91–106. David Bohm's *Causality and Chance in Modern Physics,* Von Nostrand, Princeton, 1957, has been translated as *Pričinnost' i slučajnost' v sovremennoj fizike,* (edited by Ja. Terleckij), IIL, Moscow, 1959, 248 pp.
38. *VF* 1962, 1, 122; *VF* 1962, 6, 60–62.

* English-language translations of these works have appeared since this article went to press. For a condensed text of the *Kommunist* editorial (note 3 above), see "No Coexistence of Ideas – Ayer, Kapitsa, Pipes Cases", *Current Digest of the Soviet Press,* Vol. XIV, No. 23 (July 4, 1962), 11–13; for the complete text of the *Voprosy filosofii* editorial (note 11 above), see "Philosophy Journal's Criticism of British Professor", *Current Digest of the Soviet Press,* Vol. XIV, No. 26 (July 25, 1962), 14–15. Translations of Ayer's and Kuznecov's articles (*VF* 1962, 1) appear in the first issue of *Soviet Studies in Philosophy* (Vol. 1, No. 1, pp. 14-19, 20-36). For the German texts, see *Ost-Probleme* 1962, 19.

NOTES AND COMMENTS

IDEOLOGY AND PHILOSOPHY

The six-volume *Istorija filosofii* (History of Philosophy) (Vols. 1 and 2, 1957; Vols. 3 and 4, 1959; Vol. 5, 1961) was severely criticized in *Izvestia,* June 15, 1962. The work was said to need "considerable reworking", and was accused of "weakening the Party line" in philosophy. Among other accusations, it was said that "the authors do not campaign against contemporary bourgeois concepts in the history of philosophy". The same day, *Pravda* published a remarkable criticism of Soviet writers in the field of political philosophy and ideology, saying among other things that "Authors are writing in a uniform, hackneyed style, all according to the same pattern. If you read ten or so of their works you get the impression that popular political literature is written by one hack under various pseudonyms." (*Pravda,* June 15, 1962) *D. D. C.*

An All-Union conference on philosophical questions of the physiology of higher nervous activity and psychology took place in Moscow from May 8 to 10 of this year. About 1000 psychologists, physiologists, psychiatrists and philosophers participated. Thirteen papers had been submitted to discussion, some of which were already published in the June and August issues of *VF*; there is also a report on the course of the discussions. (*VF* 1962,7). *H. F.*

There has recently been a series of ideological attacks in Soviet journals against contemporary Western philosophy. One of the more interesting of these was by B. Byxovskij, "O nekotoryx osobennostjax bor'by dvux lagerej v filosofii na sovremennom étape" (Some Features of the Struggle Between the Two Camps in Philosophy in its Contemporary Stage), *Kommunist* 1961, 1, 104–114. Byxovskij presented his readers with a rather instructive summary of Western criticisms of Marxism-Leninism by H. B. Acton, Gustav Wetter, J. M. Bocheński, Jean Paul Sartre and Henri Lefèbvre. After criticizing existentialism, neopositivism, and neo-Thomism, most of the article attacks the renegades Sartre and Lefèbvre for their turncoat criticisms of Marxism-Leninism. By making extended

quotations from these authors, Byxovskij has undoubtedly helped to make their criticisms of Marxism-Leninism available to an audience they might not otherwise have reached. The article ends by stating: "Our opponents strive to concentrate their forces on those sectors of the ideological front which at a given moment are the least consolidated. They parasitize on the gaps in our work. They throw themselves on the latest scientific discoveries while these discoveries are still unmastered by materialist philosophical thought." (p. 114). M. A. Suslov, in his report on the XXII. Party Congress in *Kommunist* 1962, 3, also notes that Marxist-Leninist analyses are lacking of the philosophical problems resulting from recent discoveries in cybernetics, mathematics, and subatomic physics: "Under the conditions of fierce ideological struggle the dialectical materialistic interpretation of these discoveries is becoming an important sector of the general front of the offensive against bourgeois ideology." (p. 32). Much the same note was sounded in the unsigned editorial, "Kritika sovremennoj buržuaznoj filosofii – važnaja zadača ideologičeskoj bor'by" (Criticism of Contemporary Bourgeois Philosophy: An Important Task of the Ideological Struggle), in *VF* 1962, 6, 3–13. This editorial was obviously a *samokritika* (self-critical) response to an editorial in *Kommunist* 1962, 8, 60–68. (Cf. pp. 207, 228, below) Existentialism, 'Freudism', general semantics and pragmatism were all criticized and linked to 'capitalist imperialism'. Especially criticized was "neopositivistic 'philosophy of science'": "Its specific method... consists in the contraposition of science and philosophy, in the denial of the right of science to philosophical conclusions, in the attempts to deprive philosophy of its concrete scientific bases." (p. 9). The editorial also added the warning that "it is necessary to take into consideration the fact that neopositivism frequently deals with quite real problems, raised by contemporary science, mathematics, logic and other scientific disciplines. Therefore criticism of neopositivism should be well argued, relying on profound knowledge of the newest data of science, and on their consequent dialectical-materialistic interpretations." (p. 10). A final note from this editorial may be of some interest to readers of *Studies in Soviet Thought:* "In recent years, in connection with the growth of the influence of Marxism, the quantity of anti-Marxist works has increased with unusual rapidity. A large number of theoretical journals have sprung up whose basic purpose is the struggle against scientific Communism. The

enemies of Marxism frequently resort to highly refined argumentation, and sometimes they attempt... to create the appearance of a 'scientific' analysis of Soviet ideology, although in fact they falsify and pervert historical facts." (pp. 11–12). *D. D. C.*

Stalin's philosophic crimes are listed by M. B. Mitin in a speech before the assembled editors of Communist philosophy journals (*VF* 1962, 4, 127–165). The principal accusation reads as follows: "Stalin committed in philosophy a number of theoretical errors, enunciated propositions isolated from life, and came out with some unfounded conclusions on a series of important questions." (p. 130). Among the lesser accusations, the following may be noted:

"In the period of hero-worship *(kul'ta ličnosti)* Stalin's work, *On Dialectical and Historical Materialism,* was raised to the level of an 'apogée' of Marxist philosophical thought though in reality it was a vulgarizing work, a rather simplified and schematic presentation of generally known truths *(obščeizvestnyx istin)*, which in places contained false statements." (p. 130).

"The fact that it was written without taking into account the accomplishments of modern science also is detrimental to the content of *On Dialectical and Historical Materialism.*" (p. 131).

"... Stalin formulated the thesis on the exacerbation of the class war as socialism achieved further successes. But this thesis was particularly erroneous *(sugubo ošibočnym)*... and theoretically justified the wanton violations of revolutionary legality which took place in the period of hero-worship." (p. 131).

"Stalin made a terrible muddle of the Marxist conception of the interrelation of the base and superstructure of society." (p. 131).

"The canonization of Stalin's formulations as indisputable truths lead practically speaking to a denigration of the philosophical heritage of Marx, Engels and Lenin." (p. 131).

"Stalin deviated from the methodological principles of Marxism in the evaluation of pre-Marxist philosophy." (p. 131).

"The situation of hero-worship, where one man had the last word in questions of theory, engendered in workers in the social sciences – philosophers included – dogmatism, commentarism and quotationism." (p. 132). *T. B.*

Fifty years of writings of A. M. Deborin, the 81-year-old veteran of Soviet philosophy, were published in 1961 in a large volume entitled *Philosophy and Policy (Filosofija i politika,* Izd. AN SSSR, Moscow, 1962, 748 pp.). Most of the writings belong to the period of the twenties. Deborin has supplied the selections with a foreword (pp. 3–19) in which he describes his path in Marxist-Leninist philosophy and stresses the necessity of a serious study of the philosophical struggles which were waged during the early period of Soviet philosophy. This would not only lay the foundation for a scientific historiography of Soviet philosophy but also advance systematical investigation (p. 19).

It is remarkable that Deborin, although confirming the legitimacy of his fight against the 'mechanists', still concedes with only a few vague phrases that his philosophical position at that time had shortcomings. The "positive work which has been accomplished during the twenties" should not "obscure the great deficiencies in the work of the philosophical front which were the subject of the well-known resolution of the CK of the CPSU, January 25, 1931, on the journal *Under the Banner of Marxism.*" In the following sentence, however, Deborin explains that the resolutions of the Twentieth Party Congress have led to a 'fundamental turn' *(korennoj perelom)* in the entire field of ideological work (pp. 18–19). It may be supposed that the labelling of Deborin and his adherents as 'menshevizing idealists' (which is still repeated in the Short History of Philosophy *(Kratkij očerk istorii filosofii),* (edited by M. T. Iovčuk, T. I. Ojzerman, I. Ja. Ščipanov), Socekgiz, Moscow, 1960, 814 pp.) is now being put into the archive of history. The same holds true for the grotesque accusation of 'underestimating' the importance of Lenin's philosophical heritage – to which Deborin now replies by reprinting some of his old commentaries on Lenin – and the accusation of trying to separate philosophy from party policies – against which the title of the present collection is apparently directed. *H. F.*

A consultative *conference on the tasks of ideological work* was recently convoked by the Central Committee of the CPSU, from January 30th to February 2nd, 1962. According to the report in *VF* 1962, 5, 147–150, over 2600 persons, mainly directors of sections *(kafedry)* of the social sciences, attended. Also represented were university rectors, and directors of other scientific institutions as well as representatives of the Party,

ministries, and other state authorities. From the Central Committee the following were present: L. F. Il'ičev, F. R. Kozlov, B. N. Ponomarev, M. A. Suslov and A. N. Šelepin.
Reports were read by M. A. Suslov, P. N. Fedoseev, S. T. Kaltaxčan (Ministry of Higher and Middle Special Education, Department of Philosophy). (The main points in Fedoseev's speech are covered in the following note). For discussion of the reports the participants formed sections; the philosophical section numbered 500 people. The discussion within the latter was centered around theoretical and organizational questions, e.g., new teaching programs on Diahistomat. The participants approved the creation of special courses and *kafedry* for Scientific Communism (starting in Moscow, Leningrad and Kiev). Philosophers were urged to take the initiative in posing and elaborating new problems raised by life and in giving recommendations concerning their solution. M. E. Omel'janovskij informed the conference about the project of a major publication on Diamat and Modern Natural Science, and M. B. Mitin proposed the foundation of a philosophical society for the USSR, which was accepted in the resolution adopted by the philosophical section. *H. F.*

An abridged text of *P. N. Fedoseev's speech at the conference* reported in the previous note appears as "The 22nd Party Congress of the CPSU and the Tasks of Scientific Work in Philosophy" in *VF* 1962, 3, 14–30. The article takes its cue from the passage of the Party Program where it is said that one must constantly defend and develop Diamat and Histomat as the science of the most general laws of nature, society and thought. The article makes the following points:
(1) The basic condition is the comprehensive analysis of the 'Leninist epoch in philosophy', i.e., bringing to the fore (in 'fundamental works') the contributions which Lenin himself and his Party made to the treasury of philosophical thought.
(2) Research in the domain of logic and epistemology is very important and complex, and contrary to their frequently proclaimed 'unity' or even 'identity', they are isolated from one another. The two together should clarify the nature of the natural and social sciences and the structure of scientific theories; they should analyze the process of generalization, the construction of models, symbolization, etc. Mathematical logic, which has too much of a tendency to lose itself in the pure technique of de-

duction and to abstain from treatment of epistemological problems, should participate in their solution. Philosophers no longer have a 'nihilistic' attitude toward it (p. 17).

(3) The demand for 'concrete, sociological investigations', which are indispensable for all branches of knowledge, including philosophy, is an essential task (p. 18). Among the most important tasks is the investigation of the 'working of the laws of the dialectic in socialism'. In doing so one must be on guard against two dangers: against voluntaristic subjectivism, which maintains that all is possible through giving orders and mobilizing wills, and against objectivism, for which everything 'builds itself from itself' (pp. 21–22).

(4) Among the various aspects of the transition from socialism to Communism more attention should be given to the development of 'socialist social relations', which has not up to now been treated in a monograph (p. 23). It must be shown how Soviet society is ever more homogeneous (p. 24).

(5) Central to considerations on the education of the new man of Communist society is the establishment of a new morality of work (voluntary work for satisfaction of one's needs and not for salary) (p. 25).

(6) Philosophical ethics must investigate the history of moral principles but above all it must consider the new problems which arise in the course of the ethical education of the constructors of Communism (p. 25).

(7) In order that all members of Soviet society have a scientific *Weltanschauung,* one must set up a well-organized system of atheistic education which will be charged, above all, with preventing the spread of religious ideas among children and adolescents (p. 25).

(8) Marxist theories on various sorts of spiritual activity – science, pedagogy, art – must be further developed (p. 26).

(9) Popularization of the accomplishments of philosophical thought also plays an important rôle in the formation of a scientific *Weltanschauung* (p. 26).

(10) Theoreticians of esthetics should boldly show artists the perspectives of the artistic development of the Soviet people instead of repeating general truths, and should defend the general principle of realism – to bring out artistically the historical process and man's place in it – against all attacks (p. 26).

(11) Progress in the elaboration of the philosophical problems of modern

science should go on. The basic problems are: theory of elementary particles, law of conservation in the microcosmos, statistical laws, mathematical abstraction, finitude and infinity, vital processes, cybernetics, and the psycho-physical problem (pp. 27–28).

(12) An essential order of combat is the criticism of bourgeois ideology and philosophy, especially of anti-Communism, which takes on new forms such as the theory of the 'uniform industrial society' toward which both Western and Communist worlds are allegedly drifting, and those philosophical trends which have the greatest influence: logical positivism, existentialism and personalism (pp. 28–30). *H. F.*

PHILOSOPHY OF SCIENCE

The Soviet physicist Pëtr L. Kapica (Kapitsa) recently criticized Soviet philosophers in an article entitled "Theory, Experimentation, Practice" in *Ékonomičeskaja gazeta,* March 26, 1962 (English translation available in *The Soviet Review,* June 1962, 14–20). At the beginning of the article, Kapica deplored the dearth of graduates in experimental physics as compared with theoretical physics, and urged that incentives be created to encourage a ratio of at least twenty to thirty experimentalists for each theoretician (he cites the present ratio as approximately one to one). Because of the complexity of modern physics, a single theoretical discovery which can be produced in a few months often requires a year or two of concentrated experimental validation by the collective work of a large group of experimentalists. Because individual recognition in such group research is seldom or belatedly forthcoming, it is hard to attract students to experimental physics. Kapica then turned to a criticism of philosophers writing on the natural sciences, and cited as an example of bad work the definition of cybernetics as a "reactionary pseudo-science" in the *Kratkij filosofskij slovar',* 1954, p. 236. Stated Kapica: "The philosophers' job should be to foresee the development of the natural sciences, not ossify stages already past. Had our scientists back in the year 1954 paid attention to the philosophers, had they accepted that definition as a guide to further development of this particular science, we may safely say that our conquest of space... could never have been made a reality, since it is wholly impossible to steer cosmic vehicles without having recourse to cybernetics... Many of us still vividly remember how some of our

philosophers, dogmatically applying the method of dialectics, were proving the unsoundness of the theory of relativity. Most specifically under fire was the postulate of the theory of relativity stating that energy equals mass multiplied by the square of the speed of light ($E = mc^2$). The physicists had long since proved this part of Einstein's law experimentally, in work with elementary particles. In order to understand and appreciate these experiments profound knowledge of modern physics was needed – something that certain philosophers lacked. And so the physicists went ahead and brought about nuclear reaction, verifying Einstein's law not in terms of single atoms but on the scale of atomic bombs. The physicists would not have been worth their salt had they followed the conclusions of certain philosophers and abandoned work on the problem of applying the theory of relativity to nuclear physics. Think of the position in which they would have placed our country had they not been ready to apply practically the achievements of nuclear physics! These are some of the most glaring examples of the isolation of certain philosophers from practice. There are many, many others, such as, for instance, incorrect evaluation of the principle of indeterminacy in quantum theory or incorrect evaluation of the theory of resonance in studying chemical relationships. It seems to me that similar faulty generalizations have been made by our philosophers not only in the realm of physics but of biology as well."

Kapica's criticisms were vigorously attacked in the Party journal *Kommunist* (1962, 8, 60–68). Kapica was accused of being overly skeptical, one-sided and unobjective, and *Kommunist* singled out Kapica's account of the law $E = mc^2$: "The author forgets to say that the overwhelming number of philosophers studying philosophical problems of natural science did not criticize this deduction of relativity theory at all, but rather its idealistic interpretation consisting in the declaration of the *conversion* of mass and even matter into energy. It is well known that among the philosophers, only individual comrades (for example A. Maksimov) strove to cast doubt on relativity theory itself..." (p. 65). This is a rather curious version of the historical facts, and one further wonders why, despite the evidence of 50-megaton nuclear explosions and the like, Soviet ideologists still regard the conversion of matter into energy as idealism'. *Kommunist* also attacked Kapica for saying, in an article entitled "The Future of Science" in the journal *Nauka i žizn'* (1962, 3), that "it is

natural to suppose that just as the successful development of the biological sciences should be based on physics and chemistry, so the development of the science about laws lying at the basis of the organization of society should be based on the science of the higher nervous activity of man." According to *Kommunist,* the laws of society and the higher nervous activity of man are qualitatively different, and explaining the one in terms of the other make as much sense as explaining subatomic processes in terms of classical mechanics. Kapica was also criticized for saying that the founders of the "basic science of higher nervous activity" were I. P. Pavlov and Sigmund Freud. Retorted *Kommunist:* "We shall not dwell on the essence of the teachings of S. Freud except to emphasize that according to such logic the teachings of S. Freud should become the basis on which would operate our science of the laws lying 'at the basis of the organization of society', that is, of social science. Such a recommendation does not deserve serious refutation – its falsity is obvious" (p. 66). *Kommunist* evidently chooses to forget that Freud was originally an eminent neurologist, and that his contributions to this science are highly valued even by those who disagree with his later psychoanalytic theories.

D. D. C.

The problem of causal determination occupies an especially important place in the consideration by Soviet philosophers of those 'philosophical problems of natural science' which are of considerable significance for a general philosophical *Weltanschauung.* In the last year a number of monographs have appeared on the subject. The IF published two collections of articles *(sborniki)* on the problem of causality in modern physics and biology in 1960 and 1961. In the more extensive of these two volumes, concerning the physical problem of causality (*Problema pričinnosti v sovremennoj fizike,* (Edited by I. V. Kuznecov, N. F. Ovčinnikov and M. E. Omel'janovskij), Izd. AN SSSR, Moscow, 1960, 429 pp.), I. V. Kuznecov gives a survey of the whole subject (pp. 5–130), and in the last chapter, M. E. Omel'janovskij goes into the central problem of the contemporary controversy concerning causality in quantum mechanics (pp. 360–426).

The other essays deal with special aspects of the problem: N. F. Ovčinnikov on causality and the conservation laws, A. I. Uëmov on causality and the irreversibility of time (Hans Reichenbach's *The Direction of Time,*

which he attacks, has now appeared in a Russian translation), S. T. Meljuxin on causality and functional relations (pp. 216–256), Ju. V. Sačkov on dynamical and statistical laws (pp. 257–311), and G. A. Svečnikov on causality and quantum mechanics (pp. 312–359).

The volume on biological problems of causality, (*Problema pričinnosti v sovremennoj biologii.* (Edited by V. M. Kaganov and G. V. Platonov), Izd. AN SSSR, Moscow, 1961, 174 pp.), includes a general consideration on causality and expediency in living nature by V. M. Kaganov (pp. 7–47), further discussions by A. E. Furman on causal limitations in progressive evolution (pp. 48–70), by A. I. Ignatov on causality in the interchange of matter (pp. 71–92), by L. N. Pljušč on determination of individual developments of organisms (pp. 93–136), by E. V. Šoroxova on the causal limitation of consciousness (pp. 137–173), and by I. L. Surova on causal connections in soil formation (pp. 172–192).

G. A. Svečnikov published a book in 1961 on causality in physics (*Kategorija pričinnosti v fizike*, Socekgiz, Moscow, 1961, 245 pp.), in which he strives to delimit the concept of causality from the concept of 'connection of conditions' *(svjaz sostojanij)*.

Likewise in 1961 a work by I. T. Frolov on causality and expediency in living nature (*O pričinnosti i celesoobraznosti v živoj prirode,* Gospolitizdat, Moscow, 1961, 184 pp.) appeared, which in our opinion penetrates into the problem more deeply than the article of Kaganov found in the above-mentioned volume.

Announced for 1962 is a work of Z. I. Zabello on the same topic of expediency and causality in the organic world (cf. *Novye Knigi* 1962, 15, p. 5).

As a more extensive example of study in the problem of causality, a Russian translation of Mario Bunge's *Causality* has appeared. (*Pričinnost'. Mesto principa pričinnosti v sovremennoj nauke.* IIL, Moscow, 1962, 511 pp.). G. A. Vasečkij has described the merits and shortcomings of the book in a brief epilogue. *H. F.*

ETHICS

According to the programmatic declarations of Marxism-Leninism one of the objectives connected with the transition from socialism to Communism is to reach a heretofore unknown degree of voluntariness and spontaneity in the observance of all norms of social behavior. This means that

authority based on external force will more and more make way for the power of inner conviction; it also means that the channels of spiritual influence are to play an increasingly important rôle in the framework of the efforts for the 'ideological' and 'moral' education of the people. Consequently, a demand has been addressed to Soviet ideologists and to the philosophers in particular to pay more attention to the theoretical as well as the practical, pedagogical questions of Communist morality.

Up to now the situation in this field was rather unsatisfactory. At a 'theoretical conference' on the topics of Marxist-Leninist ethics held by the IF in March 1959 loud complaints could be heard. A. F. Okulov, at that time the director of the Institute, said in his opening speech: "The theoretical elaboration of the questions of Marxist ethics is hitherto remaining seriously behind the tasks posed by life. Until recently only a relatively small group of people have been occupied by this work, sufficient attention has not been paid to the preparation of the specialists required, and very little literature has been published on questions of ethics. Many of the books on ethics bear the mark of abstractness, of isolation from life. . . . It cannot be considered as normal that not even at the pedagogical institutes does a course on ethics exist". (*Voprosy marksistsko-leninskoj étiki* (Problems of Marxist-Leninist Ethics), (edited by A. F. Šiskin), Gospolitizdat, Moscow, 1960, p. 6).

Professor A. F. Šiškin, the mentor of Soviet ethics and author of the most important compendia on the foundations of Communist morals (1955) and on Marxist-Leninist ethics (1961), repeated the complaints of Okulov in his main speech at the conference: "In the opening speech of the President it was already said that in the elaboration of the problems of Marxist ethics we are remaining behind the tasks which the new stage of the development of Soviety society puts before us, that only a little group *(gorstočka)* of people is occupied with this elaboration, and that for this reason we have very little literature on ethics, in spite of the enormous demand for it. One may still add that there are neither basic monographs on particular problems of ethics nor teaching aids and textbooks for the middle and high schools; no preparation of experts has been organized. This results in certain shortcomings in our propagandistic work in the field of ethics. It confines itself nearly always to a collection of examples which illustrate this or that thesis, to moral edification, etc." (*Ibid.*, p. 30). The task of Marxist-Leninist ethics, according to Šiškin, is to investigate

the general principles of morality (especially the 'laws of its development'), in particular the 'laws of formulation of Communist morality', to justify and to account for its principles and norms, and to demonstrate their significance in the struggle for Communism. A look at the literature which has appeared since the conference shows that the consideration of topical questions of moral education by far outweighs the reflections on the theoretical bases.

The book literature is on the whole very scanty. Besides the textbook of Šiškin, which in its new version (*Osnovy marksistskoj étiki* (Foundations of Marxist Ethics), 1961) has been enlarged to more than 500 pages, there has appeared a smaller course of lectures by S. Utkin, *Osnovy marksistsko-leninskoj étiki* (Foundations of Marxist-Leninist Ethics) (Rostov, 1961, 240 pp.). A more voluminous work by the same author has been announced for 1962. Moscow State University has also published a course of lectures on Marxist-Leninist ethics (*Lekcii po marksistsko-leninskoj étike,* 1961). Finally, a competition started two years ago to create a popular textbook on Communist morality should be finished in 1962. An over-all conception of Communist morality is also given by the textbook *Osnovy kommunističeskogo vospitanija* (Foundations of Communist Education), Moscow, 1960, 463 pp. In addition to his systematic work, A. F. Šiškin has also written an historical study *Iz istorii étičeskix učenij* (From the History of Ethical Doctrines) (Moscow, 1959, 342 pp.), while the sources of Marxist and Marxist-Leninist ethical thought (statements by Marx, Engels, Lenin, Krupskaja, Makarenko, Dimitroff, Thälmann, Khrushchev, *et al.*) were collected into a '*xrestomatija*' under the title *Marksistakaja étika* (Marxist Ethics) (Moscow, 1961, 511 pp.). Another contribution to ethical theory is V. P. Tugarinov's book *O cennostjax žizni i kul'tury* (On Values of Life and Culture), Leningrad, 1960, 156 pp. (Cf. review in *SST,* Vol. 2, 1962, 72–75).

Russian translations have been made from some of the literature of the 'People's Democracies': Ja. Engst (ČSR), *Některé Problémy Vědecké Ethiky* (Some Problems of Scientific Ethics), originally published in 1957; and H. Boeck (DDR), *Zur marxistischen Ethik und sozialistischen Moral* (Berlin, 1959). The Soviets have also decided to make accessible to the Russian reader the work of the American partisan of the CP, H. Selsam, *Socialism and Ethics* (1943). An article by the Argentinian philosopher Mario Bunge, "Naučnyj podxod k étike" (A Scientific Approach to

Ethics), appeared in *VF* 1961, 1, 76–90. The Rumanian academician K. I. Gulian published an article "Marksistskaja étika i problema cennosti" (Marxist Ethics and the Problem of Value) in *VF* 1962, 1, 39–53. Other recent articles on the theory of morals which have appeared are:
A. G. Kovalev, K voprosu o sootnošenii étiki s psixologiej i pedagogikoj (On the Question of the Correlation of Ethics with Psychology and Pedagogy), *VF* 1960, 6, 99–103.
O. G. Drobnickij, K voprosu o kategorii dolga v marksistskoj étike (On the Question of the Category of 'Duty' in Marxist Ethics), *FN* 1960, 3, 107–117.
V. T. Vladimirov, Ob osnovnyx pravilax obščežitija (On the Basic Rules of Society), *VF* 1960, 6, 140–143.
L. M. Arxangel'skij, O suščnosti étičeskix kategorij (On the Essence of Ethical Categories), *FN* 1961, 3, 117–125.
Ju. P. Francev, Socialističeskij kollektivizm i formirovanie ličnosti (Sociaist Collectivism and the Formation of Personality), *VF* 1961, 5, 34–46.
V. A. Šandra, Pričiny soxranenija perežitkov kapitalizma v otnošenii k trudu i puti ix preodolenija (The Causes of the Preservation of Remnants of Capitalism in Relation to Work and Means of Eliminating Them), *FN* 1961, 3, 31–40.
G. M. Dubinin, Vospitanie molodeži na revoljuzionnyx i trudovyx tradicijax zavoda (A Factory's Revolutionary and Working Traditions Used for the Training of Youth), *VF* 1960, 12, 50–61.
V. K. Bakšutov, Nravstvennoe razvitie ličnosti v kollektivax kommunističeskogo truda (Moral Development of the Personality in the Collectives of Communist Labor), *FN* 1962, 1, 41–48.
O. G. Drobnickij, Intuitivistskoe napravlenie v sovremennoj anglo-amerikanskoj buržuaznoj étike (Intuitionist Trends in Contemporary Anglo-American Bourgeois Ethics), *FN* 1962, 2, 76–82.
M. G. Žuravkov, XXII s'ezd KPSS i nekotorye voprosy étiki (The 22nd Congress of the CPSU and Some Problems of Ethics), *VF* 1962, 2, 3–14.
L. B. Volčenko, Marksistsko-Leninskaja étika o sovesti (Marxist-Leninist Ethics on Conscience), *VF* 1962, 2, 134–144.
A. F. Šiškin, O ličnom dostoinstve i česti sovetskogo čeloveka (The Personal Dignity and Honor of Soviet Man), *VF* 1962, 4, 110–121.
V. P. Tugarinov, Kommunizm i ličnost' (Communism and the Personality), *VF* 1962, 6, 15–23.

All in all, the situation does not seem to have changed very substantially, at least in the field of basic investigations. The contributions to such important problems as the freedom of the will or the objective and subjective criteria for moral responsibility and blame can be counted by the line. The axiological foundations of morals – grouped essentially around the concept of 'duty' *(dolg)* – are at their beginnings. *H. F.*

ESTHETICS

A number of Soviet delegates participated in the Fourth International Congress on Esthetics, held in Athens in the fall of 1960. A report of the congress is given by G. Kursanov and M. Rozental' in "Nekotorye napravlenija sovremennoj buržuaznoj éstetiki" (Certain Trends of Contemporary Bourgeois Esthetics), *Kommunist* 1961, 3, 99–108. The 'reactionary' Western delegates were criticized for saying that there was no such thing as 'Marxist' esthetics although Marx never made any special study of the subject and his works contain only a few parenthetical remarks about art. However, Kursanov and Rozental' also criticized the Soviet delegates: "Participation in the international discussion of the problems of esthetics revealed certain real gaps and deficiencies in the work of Soviet estheticians. For the most part there was a weak knowledge of the contemporary movements of bourgeois idealistic esthetics, and insufficiently profound and concrete criticism of their theories. Furthermore, only a narrow range of problems is being investigated, and there is an attempt to restrict oneself to generalities and questions already sufficiently explained, and a lack of research in the various genres of art and esthetic categories, etc." (p. 108.). *D. D. C.*

L. N. Stolovič's *Éstetičeskoe v dejstvitel'nosti i v iskusstve* (The Esthetic in Reality and in Art, Gospolitizdat, Moscow, 1959) has become the center of an interesting discussion. There were two critical reviews by Ja. E. Él'sberg (*VF* 1961, 1, 114–124) and S. M. Permjakov (*VF* 1961, 5, 112–123) followed by a reply of the author (*VF* 1962, 2, 110–120) and a critical review of the polemic by T. T. Napolova (*FN* 1962, 1, 154–159). Something seems to be moving in Soviet esthetics. A confirmation of this impression is the fact that a Russian translation of the classical work of Professor R. Ingarden is announced by the IIL. It may be remarked that

we almost completely lack Western studies on the *philosophical* problems of esthetics discussed in the SU. *J. B.*

SCIENTIFIC ATHEISM

During his recent visit to the Soviet Union, the Hungarian philosopher János Somogyi had the opportunity of studying the activities of the newly formed department *(fakul'tet)* of the History and Theory of Atheism at Moscow State University (MGU). Since he believes such a department should be established at Hungarian universities also, Somogyi gives an account of the above department in an article entitled "A Moszkvai Állami Egyetem Ateizmustörténeti és elméleti tanszékének munkájáról" (On the Work of Moscow State University's Department of the Theory and History of Atheism) in *Magyar Filozofiai Szemle* (Hungarian Review of Philosophy) (1962, 1, 112–118). Somogyi reports that the department at MGU was formed during the semester of 1959–1960 by enlarging and reorganizing the section *(kafedra)* devoted to the study of atheism and formerly belonging to the department of Historical Materialism. MGU thus became the second institution of higher education in the Soviet Union to have such a department, the first being the University of Kiev. The director of MGU's department is the Georgian philosopher Prof. I. D. Pancxava.

The department's activity centers on the atheist education of the university's students of philosophy. The latter take courses on scientific atheism during the third year of their studies, at which time they must possess a knowledge of higher mathematics, general physics, chemistry, biology, physiology of the nervous system, dialectical materialism, logic and the history of philosophy. The curriculum is built upon the foundation provided by the above disciplines, and involves seventy hours of lectures. In addition to theoretical studies, students are also trained for anti-religious activities. The program was designed by I. D. Pancxava and S. F. Anisimov, and is composed of the following series of lectures:

1. Atheism as the system of anti-religious views (2 hours)
2. The origins of religion (4 hours)
3. Atheism and religion in slave-owning society (4 hours)
4. Buddhism and Lamaism (2 hours)
5. Judaism (2 hours)

6. Christianity (4 hours)
7. Islam (2 hours)
8. Anti-clerical movements and views in the Middle-Ages (2 hours)
9. Anti-clericalism and atheism in the Renaissance and during the Reformation (2 hours)
10. Bourgeois atheism (10 hours)
11. The atheism of eighteenth century Russian free-thinkers and of nineteenth century Russian democratic revolutionaries (2 hours)
12. The teachings of Marxism-Leninism on religion's class and gnoseological roots and on the tasks of militant atheism (2 hours)
13. Religion and science (4 hours)
14. Religion and art (2 hours)
15. Religion and morals (4 hours)
15. The relations of the Communist Party and the Soviet state to religion and the Church (4 hours)
17. The causes of religion's remnants in socialism and the ways to eliminate them (4 hours)
18. The reactionary character of contemporary Western religious ideology (6 hours)
19. The ideology of the contemporary Russian Orthodox Church (2 hours)
20. Christian sects in the Soviet Union (4 hours)
21. Communism and religion (2 hours)

In addition to teaching, members of the department also engage in individual and collective research. Collective effort produced the major contribution to the work *Osnovnye Voprosy Naučnogo Ateizma* (Basic Questions of Scientific Atheism) (Moscow, 1962; see the review on pp. 243–247 of this issue of *SST*). The department is now working on a detailed *History of Atheism* to appear in three volumes.

Ervin Laszlo

HUNGARIAN PHILOSOPHY

A review of the fate of philosophy in Hungary since the October Revolution of 1956 is given in Tibor Hanák's "Philosophy under Kádár", *Survey* 1962, 40, 140–148. An Institute of Philosophy (as part of the Hungarian Academy of Science) was established on February 1, 1957, and the same year *Magyar Filozofiai Szemle* (The Hungarian Review of Philosophy) published its first issue, promising to give space to "polemical

articles and comment that express a different point of view". However, most of the space has since been given over to reviewing Soviet books on philosophy and castigating 'counter-revolutionary' Hungarian philosophers. The most prominent of these have been Georg Lukács, Sándor Szalai, and A. Heller, whose attempt to construct a Marxist system of ethics drew a total of 164 pages of criticism in the first two issues of *Magyar Filozofiai Szemle* for 1960. Both she and Lukács have lost their teaching posts at Budapest University. Unfortunately, in reviewing their work, Hanák has relied more on the criticisms made of it than on the original writings themselves. Hanák also briefly touches on the present state of psychology, history of philosophy, and logic. The latter was dropped from all academic curricula in 1949, but was later restored in some of the pedagogical institutes. An introductory work entitled *Matematikai Logika Kezdöknek* (Mathematical Logic for Beginners) was written in 1960 by T. Varga, but the only sizable textbook for the last ten years has been Béla Fogarasi's *Logika* (1953), which dealt only with formal, Aristotelian logic and dialectical logic (stating that the two are in conflict; see also P. S. Popov's 22-page introduction to the 1959 Russian translation). Only in a 30-page appendix to the fourth edition (1958) was mathematical logic discussed as a new field of research in logic, although, as Hanák might have noted, Rósza Péter had been making a number of distinguished contributions on recursive functions, some as early as 1934. However, mathematical logic in Hungary has become a doctrine 'declassified' from Marxist-Leninist ideology; the other provinces of philosophy remain in the grip of party politics, and have lain stagnant since 1957. *D. D. C.*

The controversy among Hungarian philosophers over the concepts of matter and infinity still continues.

The Hungarian astronomer Gedeon Róka, member of the board of editors of the atheist periodical *Világosság* (Light) and the author of 'A Világmindenség anyaga (The Material of the Cosmos) (*Csillagászati Évkönyv,* 1960 pp. 173ff.) and of a previous article "A világ'teremtése' és a modern csillagászat" (The World's 'Creation' and Modern Astronomy) (*Világosság,* 1960, 1, 25–31) devotes an article entitled "A világegyetem térbeli végtelenségé és a materializmus" (The Spatial Infinity of the Universe and Materialism) (*Világosság,* 1962, 5, 23–31) to the inter-

pretation of the problem of infinity in the light of dialectical materialism. In a lucid style he gives an expert description of the principles of Euclidean geometry followed by a résumé of the Lobačevskij, Riemann, and Einstein theories concerning space, before entering upon the discussion of the main issues in the light of his own views. He suggests that 'relativistic' theories fail to give conclusive proof of the universe's spatial limitations: Einstein himself admitted (in a paper written with the collaboration of De Sitter in 1932) that there is a solution to the basic principle of relativity theory according to which the universe is infinite. Róka asserts that the cosmological implications of relativity theory can be properly interpreted only within the framework of materialist philosophy. Dialectical materialism disagrees with the conception of infinity as an infinite succession of identical phenomena (as $1 + 1 + 1 + 1 \ldots$ etc.). In his view the infinity of the universe must be considered to be constituted by the existence of limitless forms of matter. Only the actual form of matter is concrete, and this form is also finite. The transformation-potential of finite forms is infinite, however, and as a result the concrete finite universe exists in a dialectical union with the (potential) infinite world. The infinite exists by means of, and through, the finite. To the real infinity of space and time belongs also the infinity of matter's transformation-potential. The material world cannot have any limitations, since all limits would imply that beyond its space-time confines non-material phenomena would occur.

Gedeon Róka's thesis is challenged by the philosopher József Horváth, in an article entitled "A világ anyagi egységének helyes felfogásához" (On the Proper Interpretation of the Material Unity of the Universe) (*Magyar Filozofiai Szemle,* 1962, 1, 21–32). Horváth, a more orthodox follower of the theories of Engels, tackles in his article the problem of the ontological definition of matter. He points out that although such a definition was proposed by Engels (cf. *Dialectics of Nature* and *Anti-Dühring*) contemporary materialist thinkers tend to neglect Engels' concept, in preference to Lenin's (primarily epistemological) concept, according to which matter is the philosophical category of that which exists outside human consciousness. This definition of the concept provides insufficient ground for a philosophical generalization of natural science's theories. Dissatisfied scientists have gone as far as to propose the divorce of the philosophical, from the scientific, concept of matter. There

is, however, just lately, a salutary tendency among some philosophers to devote more attention to the problem of an ontological concept. Among the attempts to work out a satisfactory definition Horváth distinguishes two exaggerated and fallacious trends. One he terms the mechanistic, metaphysical formulation of the problem which results in the waste of serious effort in the vain hope of deriving the qualitative pluralism of matter's mode of existence either from a conceptual prime matter, or reducing it to one of its concrete forms of appearance – usually the physical, by formulating various extensions to the laws of physics to make these apply to all areas of reality. The other fallacy of contemporary thinkers lies in the assumption of a relativistic standpoint, only superficially mitigated by the introduction of the law of dialectics to account for the processes of evolution. Gedeon Róka's views (see above) provide an example of this trend in Hungary, Soviet representatives of which include X. M. Fataliev, V. I. Sviderskij and others. The major error of these philosophers is their failure to set limits to the transformation-potential of matter (thereby misinterpreting or disregarding the views of Engels) with the result that they arrive inevitably at the loss of the fundamental properties of matter: an unlimited series of transformations may produce completely unknown forms and modes of material existence, and clear the way for the introduction of idealism. According to Horváth the material unity of the universe lies in the infinity of matter, in the absolute and universal nature of its common, most general attributes, as well as in the thereby presupposed validity of the theory of eternal cyclic evolution.

Ervin Laszlo

GENERAL

A thorough 'de-Maotization', if such a term may be allowed, is operated by Professor A. C. Cohen in an article published in *Problems of Communism* (How original is 'Maoism', *Problems of Communism,* Vol. 10, 1961, 34–42). "If one can speak at all of an 'ideology of Mao' or 'Maoism', they differ from Marxism-Leninism primarily in matter of method and form, and not of essential substance." (p. 42). Moreover, according to the author, very little merit can be ascribed to Mao from the Marxist-Leninist standpoint. Among other things, he shows convincingly that – as was already known through Professor Karl Wittfogel – "On contradiction" was not written, in its actual form at least, in 1937 but around

1950. Whatever Mao wrote before that date was characterized by "primitiveness of his philosophical ideas". *J. B.*

Dr. Z. Jordan has published an excellent survey of Polish revisionism with stress on its philosophical aspects (Rewizjonizm polski. Jego cechy uniwersalne i specyficzne, *Kultura* 1961 12/170, 15–29; 1962, 1/171, 21–44). An ample work of the author on the same subject is forthcoming in the *Sovietica* series. *J. B.*

According to V. P. Šestakov (*VF* 1962, 3, 178), a collective volume has been published by the Institute of the Nations of Asia (*Kratkie soobščenija Instituta narodov Azii*, LVII. Izd. vostočnoj literatury, 1961). The volume is mostly devoted to problems of the history of Indian philosophy. *J. B.*

There is a short survey of French Communist writings on Teilhard de Chardin by Ju. A. Levada in *VF* 1962, 1, 153–155. We quote the presentation of the French thinker: "Pierre Teilhard de Chardin (1881–1955) important *(krupnyj)* geologist and paleontologist-evolutionist, president of the French geological society, member of the Academy, one of the 'first discoverers' of the *sinanthropus* – was a member of 'the Order of Jesus' ". (The last is wrong: he was a member of the Company of Jesus, i.e. a Jesuit – there is no such thing as the 'Order of Jesus'). *J. B.*

Ja. K. Kronrod's article, "Some methodological questions of political economy" (*VF* 1962, 5, 30–43), is an attempt at 'de-Stalinisation' in this domain. "It is well-known that on many questions of the economic theory of socialism as well as of capitalism Stalin committed methodological errors which had a mechanistic as well as a voluntaristic, teleological character." (p. 30). *T. B.*

In *FN* 1962, 2, 139–141, one A. Ja. Jakimov of the Diamat Section *(kafedra)* of the philosophy faculty at MGU gives a vicious and thoughtless review of David Joravsky's *Soviet Marxism and Natural Science (*1917–1932*)* (this book was reviewed in *SST*, Vol. 2, 1962, 142–148). Jakimov refers to Joravsky as a 'Kremlinologist' and a 'positivist', labels which are obviously (to anyone who has *read* the book) wide of the mark. Jakimov summarily rejects all of Joravsky's evidence of the metaphysical

tendencies in Marx's writings and the positivistic tendencies in Engels' works. Jakimov takes particular offense at Joravsky's suggestion that many of the contributions of Soviet science during the 1920's was achieved by Russian 'bourgeois specialists' who were unsympathetic to the Bolshevik regime. Jakimov ends his piece by claiming that Joravsky's book "reflects the deep moral and scientific decay of bourgeois ideology, indicating the inevitable result of the deepening general crises of capitalism" (p. 141). It is unfortunate that a scholarly analysis such as Joravsky's should be given such a vituperative and uncritical review in a philosophical journal; from the tone of the review and the fact that Joravsky's name is spelled 'Gouravsky', one wonders whether the book really was read by the reviewer. *D. D. C.*

New editions of some basic textbooks have been announced for 1962: *Osnovy marksistskoj filosofii* (first edition 1958) and *Osnovy marksizma-leninizma* (first edition 1959), as well as the philosophical dictionary *Kratkij filosofskij slovar'* (4th edition 1954). The second edition of *Osnovy marksistskoj filosofii* has already appeared; besides several minor changes, the philosophical-historical introduction has been abridged in favour of an enlarged presentation of political and sociological topics. Here new sections on the theory of war and of national liberation movements have been added. *H. F.*

The next meeting of editors of philosophical journals of the SU and satellites will take place in Prague at the beginning of 1963. The themes to be discussed: a) Dialectical Materialism and philosophic questions of modern science, b) Problems of the formation of Communist consciousness. (*VF* 1962, 4, 128). *T. B.*

Professor Alfred Tarski seems to be read now – *mieux vaut tard que jamais* – in his major works and better understood in the Soviet Union. P. V. Tavanec has an article in the recent *Filosofskie voprosy sovremennoj logiki* (*IF* 1962, 140–152) which shows that *Der Wahrheitsbegriff* (and not just some popular article) is known to him. Moreover, Tavanec says explicitly: "The acceptance of the semantic definition of truth does not of itself lead to either materialism or idealism" (p. 145) and he accuses 'some positivists' (Professor Stegmüller is quoted) of misunderstanding

Tarski. They were certainly not alone in doing so: *everything* published in the Soviet Union on Tarski's definition of truth up to this article was at least a misunderstanding and often worse. *J. B.*

ERRATA

The following *corrigenda* should be noted in respect to the article of L. H. Hackstaff and J. M. Bocheński entitled "A Study in Many-Valued Logic" in *Studies in Soviet Thought,* Vol. 2, 1962, 37–48. To begin with the minor typographical errors, Zinov'ev's book is divided into six chapters, rather than five, as stated in the first line of section I on page 37. Secondly, line 2 of the truth table on page 46 should read "1 0 0 1 1" instead of "1 0 0 $\frac{1}{2}$ $\frac{1}{2}$". Third, the formula in the sixth line from the bottom of page 46 should be printed *without* brackets, inasmuch as the formula presently printed is in fact a theorem of the Heyting intuitionistic propositional calculus.

A more serious error is the following. On page 45 it is stated that "In Chapter 2, Zinov'ev constructs a system of three-valued truth-tables which are supposedly sufficient to represent the intuitionistic propositional calculus", and section V (pp. 44–47 of the article), written by Hackstaff, is devoted to proving that Zinov'ev's three-valued matrices do not generate a system equivalent to the intuitionistic propositional calculus. In all fairness to Zinov'ev, it should be pointed out that he never made such a claim, and in fact specifically denies the equivalence in a paragraph on page 26 of his book which the authors of this article overlooked:

"The axiomatization of the intuitionistic propositional calculus possesses one interesting property: it is confirmed by (is verified by, satisfies) the above-mentioned matrices, but the latter verify additional propositions which are not deducible in the axiom system. Briefly speaking, the latter is not equivalent to the truth-tables (matrices). (Cf. Z. Zawirski, Geneza i roswój logiki intuicjonistycznej, *Kwartalnik Filozoficzny,* Kraków, 16, 1946.; S. C. Kleene, *Introduction to Metamathematics,* Princeton, 1952; and T. Kotarbiński, *Wykłady z dziefów logiki,* Lódź, 1957). For example, the assertions $ACxyCyx$ and $CCNNxxAxNx$ are not deducible in Heyting's axiomatic system, yet here for any value of x and y they are true. In particular, $CCNN\frac{1}{2}\frac{1}{2}A\frac{1}{2}N\frac{1}{2} = CC1\frac{1}{2}A\frac{1}{2}0 = C\frac{1}{2}\frac{1}{2} = 1$. As Gödel has shown (in Zum intuitionistischen Aussagenkalkül, *Akademie der*

Wissenschaften in Wien, Mathematisch-naturwissenschaftliche Klasse, Anzeiger, vol. 69, 1932), the intuitionistic propositional calculus cannot be characterized on the basis of any truth-tables with a finite number of truth-values in the sense that no matrix with a finite number of truth-values can be equivalent to Heyting's axiomatic system." (*Filosofskie Problemy Mnogoznačnoj Logiki*, p. 26).

Thus the formula at the bottom of page 46 of the article (which in Polish notation can be written as *CNKpqANpNq*), produced by Hackstaff as a counter-example, turns out instead to be a supplement to the two formulae *ACxyCyx* and *CCNNxxAxNx* which Zinov'ev had already given as examples of the non-equivalence of the matrices and the axiomatic system. *J. B., D. D. C.*

REVIEWS

Osnovnye Voprosy Naučnogo Ateizma, (Moskovskij gosudarstvennyj universitet. Kafedra istorii i teorii ateizma, pod redakciej professora I. D. Pancxava) Socekgiz, Moscow, 1962, 412 pp.

The *Basic Questions of Scientific Atheism* is – as would be expected of the author of one of the better post-Stalin texts (*Dialectical Materialism,* Moscow 1958) – a far more serious endeavour than the other reviewed book. There is, nevertheless, the same *ad nauseam* repetition of the stock-in-trade of nineteenth century anti-clericalism: the evils of the inquisition, the humiliation of the index, the incompatibility of evolution and creation, the sexual difficulties of monastic life, etc. etc. The book has three main objects: give a 'diamat' version of the history and character of the major extant religions; destructively criticize these by giving the 'atheist' answer of diamat; provide guidelines for the activity of the anti-religious catechist. The chapters are: Marxist atheism, The highest form of atheism, The origins of religion, The class-bound and epistemological core of contemporary religion, Christianity, Islam, Judaism, Buddhism, The scientific and religious Weltanschauungs, Critique of religious morality, Comportment of the Communist Party and Soviet government toward religion and churches, Causes of the existence of religious vestiges in the USSR, Forms and methods of scientific, atheistic propaganda. A glossary of "Religio-mythological personages" is appended: of the 22 listed, 11 are from the Old Testament, 7 from the New Testament and 4 from outside the judaeo-christian dispensation (Allah, Buddha, Buddha's mother, and Mitra).

The philosophic interest of this *summa contra fideles* lies in Chapter VIII, Part 2: "The untenability of the proofs for the existence of God", where Pancxava outlines the Diamat refutation of Anselm's 'ontological proof', of Aquinas' *quinque viae,* and of Kant's 'so-called moral proof'. Because of the rarity of such a thorough (six whole pages) treatment of these proofs, we reproduce below a translation of Pancxava's presentation and refutation of these arguments.

"Anselm of Canterbury (1033–1109) reintroduced the ontological proof for the existence of God. According to him, analysis of man's concept of God shows that we find the proof for the existence of God in the concept

itself. The concept of God is the concept of that all-perfect being, greater than which man cannot conceive. And once this concept of the most perfect being exists in the mind of man it must necessarily exist in reality. For, if it existed only in the mind of man then it would not be all-perfect since only an existant can be called all-perfect. The ontological proof for the existence of God was refuted already in the eleventh century by Gaunilo. ....

"The insufficiency of the ontological proof for the existence of God was sensed by the late scholastics who tried to give a more profound philosophical base to the existence of God. In the thirteenth century, Thomas Aquinas, writing the encyclopedia of official Catholicism, refuted the ontological proof for the existence of God and introduced five other proofs which he borrowed from ancient and medieval philosophers, like Plato, Aristotle, etc.

"First Proof: there must be a first mover. Everything which moves is moved by something else. Since a *recursus ad infinitum* from cause to effect is impossible, we must ultimately reach something which moves without itself being moved. This immobile mover is God.

"This proof for the existence of God is refuted by Dialectical Materialism which bases itself on the data of the natural sciences. Motion is an existential form of matter. Since matter is eternal so is motion because it had no beginning and will have no end. For its motion and development matter has no need of an external source of motion. The source of motion is within matter; it is the internal contradictions present to all things and phenomena; it is the unity and conflict of those contrary trends of development which are included in every phenomena and in all of matter as a whole.

"The first proof for the existence of God is essentially a portion of another, more general proof.

"Second proof: there must be a first cause of all existants. Every phenomenon has a cause; this cause, as a phenomenon, must also have a cause, and so on indefinitely. Ultimately there must be a cause for which there are no causes and which is the cause of itself. This is the ultimate cause, the absolute cause of the world, the divinity. This reasoning is based on the hypothesis that the world has a beginning in time and a final limit in space.

"Dialectical Materialism teaches that 'cause and effect are representations *(predstavlenija)* which have significance as such only in application to a

given, specific case; but the moment we regard this given case in its general connection to the whole world system these representations are transformed into representations of universal interactivity in which causes and effects are constantly changing place; that which here or now is cause becomes then or there effect and vice versa. (F. Engels', Anti-Djuring, str. 22). Engels' statement utterly destroys all the arguments of theological theories on a first cause. It is nonsensical to even pose the question on the cause of the existence of the world as a whole; the material world exists eternally. The material phenomena of this world act upon one another and condition one another. Therefore, the material world as a whole needs no sort of first cause for its existence.

"The second proof, like the first, is based on the false premiss of the finitude of the world in space and time. The scientific accomplishments of contemporary natural science have definitively refuted the theological conception of the finitude of the world and have showed that the world always was and will be eternally moving and developing matter which exists in limitless space and time. The theory of the finitude of the world is based on an erroneous extrapolation of the laws of a limited domain to the entirety of the limitless universe.

"Marxism says that the concepts limited and unlimited have a relative character. That which seems unlimited within the limits of a given (period of) time or within certain frontiers may be limited within a more general scale of space and time; on the contrary, that which seems limited may be unlimited in depth. Therefore, all theological arguments for the existence of God, which are based on the finitude of the world, lose all foundation.

"The third proof reads: all things are accidental; an absolutely necessary being must exist.

"Engels showed in 'Dialectics of Nature' the complete insufficiency of the metaphysical assertions that in nature every phenomenon is either necessary or accidental. Dialectical Materialism views necessity and accidentality not as two mutually exclusive notes *(priznaka)* or as two groups of independently existing phenomena, but as interwoven phenomena. Accidentality is the phenomenal form *(formoj projavlenija)* of necessity. Therefore, necessity is included in the things themselves in the form of a general law *(zakonomermost')* of their existence during all accidental deviations from it.

"Fourth proof: the fact that there are things at different degrees of perfection means that there must be an absolutely perfect being. This fourth proof is essentially the same as the ontological proof against which Thomas Aquinas himself fought and the untenability of which we have already showed.

"The fifth proof for the existence of God is based on the order *(celesoobraznosti)* observed in nature. This order (for example, the structure and behavior of living beings), according to T. Aquinas, cannot be explained by natural causes. This means that there exists a supernatural, rational being who orders the world.

"The discoveries of C. Darwin showed the complete insufficiency of assertions on the supernatural character of life and explained the natural causes of order in nature. . . . (We here omit a long peroration on how much Timirjazev and Lenin appreciated Darwin).

"Every new discovery of science reveals more and more the untenability of the 'proofs' for the existence of God, which we have examined.

"In modern times I. Kant in his 'Critique of Practical Reason' refuted the old arguments for the existence of God and introduced the new, so-called moral, proof for the existence of God. It consists in the following: justice demands that happiness be in proportion to virtue; only God can establish such justice and this not in this world but in the other; therefore, there is a God and a hereafter. Kant stated that knowledge and faith do not exclude one another and that if the existence of a supernatural world could not be proved then such a world could be the object of faith. Faith in divine providence is, according to Kant, at the same time faith in the moral order of the world. 'The moral order is precisely the "divinity" the existence of which we admit.' Kant's argument was very popular throughout the whole nineteenth century.

"Kant's ethical doctrine suffered from over-abstraction; he transferred questions of society from life into an abstract sphere of a priori ideas. Therefore, although Kant considered the real existence of such 'things in themselves' as God and the soul as unproved, he accepted representations of God and the soul as practically useful since they restrain some people from undesirable acts. 'Kant', wrote Marx and Engels, 'contented himself with simple "good will" even if it remained ineffective and (he) put off the *implementation* of this good will, of the harmony between it and the needs and inclinations of individuals, to the *other world.* This Kantian

good will fully corresponds to the impotence, stolidity and wretchedness of the German burger..." (K. Marx and F. Engels, Soč., t. 3, str. 182). "This short survey of the 'proofs' for the existence of God as found in the history of philosophy and in theology shows that all of them either contain logical errors or are ultimately based on faith as final premiss."

T. J. Blakeley

Osnovy Naučnogo Ateizma, (Akademija nauk SSSR, Institut filosofii), Gospolizdat, Moscow, 1961, 455 pp.

There is little in this book to justify its title, *Principles of Scientific Atheism,* for it contains no discussion of principles, is not the least bit scientific and deals not with atheism but with threadbare anti-religious slogans. The fourteen chapters carry the following titles: The origins and development of atheism, The conflict of science and religion, The origins of religion, Judaism, The origins of christianity, Orthodoxy, Catholicism, Protestantism, Christian sects in the USSR, Islam, Buddhism, Attitude of the CPSU and the Soviet government toward religion and churches, Religious morality and Communism, Religious remnants in the USSR and paths toward elimination of them.

V. K. Tančer's remarks on the lack of interest shown by Soviet university students in "scientific atheism" (s. *FN* 1959, 2, 220–222) become understandable when one sees what the Institute of Philosophy of the Academy of Sciences allows to be published in this domain. Religion is defined à la Engels as "the fantastic reflection in peoples' heads of those external forces which reign over them in their daily lives" (p. 114). Judaism, "like all other religions, was always inimical to the revolutionary fight of workers for a new world" (p. 144). As for Christianity, "there are no proofs of the historical existence of Jesus Christ" (p. 171) and His "biography, reflected in the gospels, is full of absurdities *(nelepostej)* and contradictions, which also proves *(dokazyvaet)* the mythical character of Jesus" (p. 172). "The doctrine of Orthodoxy is an agglomeration of dogmas which are anti-scientific and reactionnary." (p. 197). "Protestantism is a militantly anti-scientific Weltanschauung..." (p. 256). "Islam... defended the interests of the exploiting elite." (p. 316). "A tool for the

oppression of workers, Buddhism is one of the essential factors in the economic and cultural backwardness of the people professing it." (p. 355).

These passages are typical of the philosophic depth missing from the book.

T. J. Blakeley

Georg Lukács: *Schriften zur Literatursoziologie*, (ausgewählt und eingeleitet von Peter Ludz), Soziologische Texte, Bd. 9, Hermann Luchterhand Verlag, Neuwied, 1961, 558 S.

Es überrascht, den "ersten repräsentativen Querschnitt durch das Gesamtwerk von Georg Lukács" in einer Reihe soziologischer Texte zu finden. Der Herausgeber, der Berliner Soziologe und Politische Wissenschaftler Peter Ludz, räumt ein, daß das Werk von Lukács "gleichzeitig mehr und weniger als eine Soziologie der Literatur" sei. Mehr insofern, als die literaturtheoretischen und literaturkritischen Arbeiten des heute 77-jährigen ungarischen Denkers Teil sind einer umfassenden und übergeordneten Geschichtsphilosophie, des Marxismus-Leninismus. Weniger insofern, als seine oft genialen Einsichten in die sozialen und politischen Zusammenhänge der Literatur fragmentarisch bleiben. Wie Ludz bemerkt, ist es auch Lukács nicht gelungen, das seit Marxens *Einleitung zur Kritik der politischen Ökonomie* ungelöste Problem einer Systematisierung der marxistischen Ästhetik zu lösen.

In seiner ausführlichen, kenntnis- und gedankenreichen Einleitung periodisiert Ludz das mannigfach gebrochene Lebenswerk folgendermaßen: 1. Die vormarxistische Frühzeit 1907–1912, in der Lukács noch unter dem Einfluß des George-Kreises und der bürgerlichen Philosophie der Jahrhundertwende (Neuplatonismus, Lebensphilosophie, Phänomenologie, Neukantianismus) stand; das bekannteste Werk dieser Periode ist *Die Seele und die Formen* (1911). 2. Die revolutionär-avantgardistische Periode 1914 bis Ende der zwanziger Jahre, in der Lukács sich dem Kommunismus zuwandte; repräsentiert durch *Theorie des Romans* (1920) und *Geschichte und Klassenbewußtsein* (1923). 3. Die Wendung zum Realismus, bewirkt durch die ersten massiven Angriffe der Funktionäre, aber wohl auch durch das Abschwellen der revolutionären Welle; in dieser Zeit polemisierte Lukács in der kommunistischen Literaturzeitschrift *Linkskurve* gegen den Expressionismus und die neusachliche Arbeiterliteratur. 4. Die – grob gesprochen – sozialistisch-realistische Orientierung, die mit der Emigration in die Sowjetunion 1933 einsetzt und mit dem Tod Stalins 1953 endet; dieser Periode entstammen die großen literaturhistorischen Forschungen über die deutschen Klassiker und Realisten, über Balzac, Scott und Tolstoj und die *Beiträge zur Geschichte der Ästhetik* (1954). 5. Schließlich der Revisionismus, pro-

grammiert durch die Reden auf dem Schriftstellerkongreß der Sowjetzone und vor der Budapester Akademie 1956.

Diese Periodisierung leuchtet im wesentlichen ein. Ich würde jedoch die Phasen 3 und 4 zusammenziehen als die zentrale Periode, in der Lukács seine Realismus-Konzeption entfaltet hat, und statt dessen die Jahre 1949 1953 abtrennen, in denen er sich unter dem Druck des ungarischen Kultur-ministers Revai weitgehend dem Stalinismus anpassen mußte, z.B. in der Zweitfassung des *Russischen Realismus* (1952) und in der *Zerstörung der Vernunft* (1953). Lukács' Konzeption des "großen Realismus" ist nämlich – trotz terminologischer Mimikri – nicht identisch mit der Parteidoktrin des Sozialistischen Realismus; sie ist, wie auch Ludz darlegt, ein melancholischer Nachklang der deutschen Klassik, der der deutsch schreibende Ungar immer am engsten verbunden war. In der Ideenwelt der deutschen Klassik, vornehmlich in ihrer jakobinisch-utopischen Ausprägung, ist denn auch das Element zu sehen, das das gesamte Werk von Lukács über alle Wechselfälle hinweg eint. Nicht zufällig hat er einen seiner schönsten Essays über Hölderlin geschrieben (der leider in der Auswahl fehlt); nicht zufällig waren die Sternstunden seiner politischen Karriere tragisch-utopische Unternehmungen: die Teilnahme an den Revolutionsregierungen Bela Kún 1919 und Imre Nagy 1956.

Der Band dokumentiert alle Perioden durch charakteristische, zum Teil sehr seltene Texte, und zwar gegliedert in Teil I: Geschichtsphilosophische und theoretisch methodologische Grundlegung, und Teil II: Historisch-soziologische Interpretationen. Unberücksichtigt blieben die wesentlich politischen und philosophischen Schriften wie *Geschichte und Klassenbewußtsein, Der junge Hegel* und *Zerstörung der Vernunft* und natürlich auch viele literaturgeschichtliche Einzelstudien, die das soziologisch firmierte Unternehmen gesprengt hätten.

Jürgen Rühle

Recent Soviet Psychology (ed. by Neil O'Connor), Pergamon Press, Oxford, London, New York, Paris, 1961, 334 pp., 70s.

The title of this book is something of a misnomer, inasmuch as it is not a book *about* recent Soviet psychology, but a collection of translations of technical articles which originally appeared in Soviet journals, just like its equally mis-named predecessor, *Psychology in the Soviet Union,* (ed. by Brian Simon, Stanford University Press, Stanford, 1957).There is as yet no book *about* Soviet psychology, with perhaps the exception of Joseph Wortis' *Soviet Psychiatry* (Baltimore 1950) and Raymond Bauer's *The New Man in Soviet Psychology* (Harvard University Press, Cambridge, 1952), which are now rather out of date. Until this unfortunate lacuna is filled, it will be difficult for the non-specialist to know what the currents and trends in Soviet psychology are. Fortunately, O'Connor's collection, based on a list of suggestions sub-mitted by the Psychology Section of the Moscow Academy of Sciences, gives a fairly representative cross-section of work being done by a number of contemporary Soviet psychologists. Most of the papers are quite technical, however, having originally appeared in *Voprosy Psixologii* (Problems of Psychology), and they cover work in Pavlovian typology, educational psychology, sensation, speech, perception and sets. Work on verbal control of behavior in subnormal patients has also been included, but reports of experimental conditioning in animals and other primarily physiological work, which usually appear in *Žurnal Vyssšej Nervnoj Dejatel'nosti imeni I. P. Pavlova* (Pavlov Journal of Higher Nervous Activity), have been omitted. The three general topics treated in the book are: (1) the continuation of the physiological work begun by I. M. Sečenov and Pavlov; (2) the work on speech and learning begun by L. S. Vygotskij and continued by A. R. Luria, A. N. Leont'ev, F. V. Bassin and others; and (3) the work of the school founded by D. N. Uznadze in Tbilisi, Georgia, which is rather independent of the Russian psychologists in Leningrad and Moscow.

In general, it can be said that Soviet psychologists prefer explanations based on physiology rather than on a molar psychological approach. This derives in part from the substantial legacy of Pavlov, but, as K. N. Kornilov has argued, leaves unresolved the question of whether psychology is part of physiology or independent of it. Because of their concentra-

tion in certain fields, Soviet psychologists have yet to produce a coherent view of social phenomena, and they lack a developed psychology of unconscious behavior and emotional development. The latter in part stems from their antipathy to Freudian theory, which they regard, paradoxically, as both 'idealistic' and excessively mechanical (it is said to be too crude in interpreting the relationship between conscious, voluntary activity and sub-cortical drives).

In his introduction, O'Connor makes some interesting observations on his visits to Soviet laboratories. He has included a lengthy quotation from an interview with Leont'ev and Luria on the principle of 'reflection' in psychology which will be of considerable interests to philosophers who want to learn how Soviet psychologists evaluate the principle and its application to their world (pp. 16–17). O'Connor also notes that Marx and Engels were seldom referred to in his discussions, and in general he "found extremely little mechanical or hide-bound application of dialectics. ... Russian psychologists may apply dialectical principles in their thinking about problems but for the most part, both in groups and as individuals, they do not refer to the relationship between a prevailing philosophy and individual experiments any more than would English or American psychologists." (p. 16). O'Connor also notes that most articles in the Soviet psychological journals no longer have a lengthy philosophical prolegomena, but instead limit themselves to exposition of the experimental data and its interpretation. Purely philosophical articles by physiologists and psychologists have been turned over to *Voprosy Filosofii* for publication there. O'Connor remarks that "so far as the Russian use of dialectical materialism is concerned one is left with the impression that its application has gone beyond the stage of the use of phrases as dialectic pronouncements and has become part of the mental equipment of working scientists much as nineteenth-century empiricism and positivism lies behind the thinking of many English scientists. ... Such theories as those of mental reflection and the primacy of matter certainly influence thought but they have become as implicit as positivism is in Britain." (p. 18).

O'Connor suggests that there is less ideological control over Soviet research in psychology than is usually thought to be the case in the West. He states that "areas of work are unexplored but this appears to be a question of individual ingenuity rather than of general decision" (p. 17). This may be so in many cases, but this reviewer found during his own

visits to the Soviet Union that there was a definite tendency to avoid discussion and research about theories, like those of Freud, which had been condemned by the ideologists. Moreover, one has the feeling that O'Connor has gone a bit too far in trying to equate the Soviet and Western research environments. One can sympathize with his desire not to enter into a philosophical polemic, which as he points out, tends to produce hypercritical reactions among Soviet psychologists, but the cause of truth and science are not served by such generalizations as: "We should not too readily criticise the limitations on academic freedom in Russia today. They do not seem to exist in any greater degree than in England or America, whatever may have been true of certain Institutes during the war and shortly after" (p. 14). As one example of such similarity, O'Connor cites the respective Soviet and British views on the value of intelligence-testing. The Soviets banned intelligence-testing by decree in 1936; the British have gradually reduced the emphasis on intelligence-testing, particularly in academic admission policies and the '11-plus' examination. But it really is not true to say that "the positions of Britain and Russian on this question have gone through similar phases" (p. 13). O'Connor admits that the British have been 'slower' and 'more empirical', but somehow he has lost sight of the question of which decision procedure was more scientific – a flat ban by ideological decree, or a gradual re-evaluation of measurement techniques which finally led to a de-emphasis.

It is gratifying to note that the numerous references in the book are given both in translation *and* transliteration from the Russian. Omission of the latter in the earlier book edited by Simon made it almost useless as a reference book, and it is to be hoped that any future collections of this kind will include transliterations of all references and full bibliographical data.

D. D. Comey

CHRONOLOGY
(addenda 1961)

31 May and 7 June	Conference at the Faculty of Philosophy of MGU on "The Nature of the Esthetic" (*FN* 1962, 1, 171–174)
30 Aug.–6 Sept.	Soviet participation in international conference at Norwich, England (*VF* 1962, 2, 151–153)
30 Nov.	Linus Pauling visits VF (*VF* 1962, 2, 145–150)

1962

Jan.	Meeting at Rostov of *VF*-editors with readers at the 'Rostsel'maš' plant (VF 1962, 5, 151–154)
4–5 Jan.	Meeting of Philosophy Faculty of MGU on "Criticism of the Imperialistic Ideology of Anti-Communism" (*VF* 1962, 3, 148–151; *FN* 1962, 2, 141–144)
30 Jan.–2 Feb.	All-Union conference of directors of studies in social science; in Moscow with 2,600 participants (*VF* 1962, 5, 147–150)
Feb.	Meeting in Leipzig of the editorial staffs of Soviet and satellite philosophic journals (*VF* 1962, 4, 127–128; see also 129–165)
March	Visit of A. J. Ayer to MGU and LGU to give lectures (*VF* 1962, 5, 155–156)
8–10 May	All-Union conference in Moscow on philosophical questions of the physiology of higher nervous activity and psychology (s. Notes and Comments, p. 220)

SIEGFRIED MÜLLER-MARKUS

BIBLIOGRAPHY OF PHILOSOPHICAL ARTICLES IN *USPEXI FIZIČESKIX NAUK* (1918–1962)

In the December 1961 issue (tom. LXXV, vyp. 4) of *UFN* there is a 160-page index of all the articles published in the first 75 volumes of *UFN* (1918–1961); an alphabetical index of authors (pp. 630–707), a subject index (pp. 707–771), and an index of reviews (pp. 771–789). This bibliography was compiled largely from the section entitled "Philosophical and Methodological Problems of Physics" (pp. 762–763). The number after the year refers to the 'tom' (volume).

1. Anri, V.: Sovremennoe naučnoe mirovozzrenie, *UFN* 1920, 2, 3ff.
2. Bloxincev, D.: Vsegda li suščestvuet 'dualizm' voln i častic? *UFN* 1951, 44, 104ff.
3. Bloxincev, D.: Kritika idealističeskogo ponimanija kvantovoj teorii, *UFN* 1951, 35, 195ff.
4. Bloxincev, D.: Kniga V. I. Lenina 'Materializm i empiriokriticizm' i sovremennye predstavlenija o strukture elementarnyx častic, *UFN* 1959, 69, 3–12.
5. Bogoljubov, N. N. and Sanočkin, Ju. V.: Ljudvig Bol'cman, *UFN* 1957, 61, 7–15.
6. Bor, N. (Niels Bohr): Diskussii s Ejnštejnom o problemax teorii poznanija v atomnoj fizike, (Translation of "Discussion with Einstein on Epistemological Problems in Atomic Physics" in *Albert Einstein: Philosopher-Scientist*), *UFN* 1958, 66, 571–598.
7. Bor, N. (Niels Bohr): Kvantovaja fizika i filosofija, (Translation of "Quantum Physics and Philosophy" in *Causality and Complementarity*), *UFN* 1959, 67, 37–42.
8. Bor, N. (Niels Bohr): O edinstve čeloveskix znanii, *UFN* 1962, 76, 21–24.
9. Born, M.: Fizičeskaja real'nost', *UFN* 1957, 62, 129–139.
10. Born, M.: Éksperiment i teorija v fizike, *UFN* 1958, 66, 353–374.
11. Born, M.: Kosmičeskie putešestvija i paradoks časov, (Translation of "Ein Besuch bei den Raumfahrern und das Uhrenparadoxon"). in *Physik. Blätter,* Vol. 14, 1957, 207ff. *UFN* 1959, 69, 105–110.

12. Born, M.: Vozmožno li predskazanie v klassičeskoj mexanike, (Translation of "Vorhersagbarkeit in der klassischen Mechanik", *Zeitschrift für Physik,* Vol. 153, 1958, 372–388). *UFN* 1959, 69, 173–187.
13. Butov, A., and Švidkovskij, E.: O zakone vzaimosvjazi massy i energii (protiv idealističeskix izvraščenii v tolkovanii zakona $E = mc^2$), *UFN* 1952, 48, 147ff.
14. El'jaševič, M. A., Tomil'čik, L. M., Fedorov, F. I.: Review of: A. K. Maneev, *K kritike obosnovanija teorii otnositel'nosti. UFN* 1961, 74, 757–759.
15. Fabrikant, V. A.: Isaak N'juton, Iogann Bernulli i zakon soxranenija količestva dviženija, *UFN* 1960, 70, 575–580.
16. Rešenie učenogo sovieta Fizičeskogo Instituta imeni P. N. Lebedeva AN SSSR, 9 fevralja 1953g.; 'O filosofskix ošibkax v trudax akademika L. I. Mandel'štama', *UFN* 1951, 51, 131ff.
17. Fok, V.: Kritika vzgljadov Bora na kvantovuju mexaniku, *UFN* 1951, 45, 3ff.
18. Fok, V.: Zamečanija k tvorčeskoj avtobiografii Al'berta Ejnštejna, *UFN* 1956, 59, 107ff.
19. Fok, V.: Ob interpretacii kvantovoj mexaniki, *UFN* 1957, 62, 461–474.
20. Fok, V.: Zamečanija k stat'e Bora o ego diskussijax s Ejnštejnom, *UFN* 1958, 66, 599–602.
21. Fridman, V. G.: Po povodu stat'i S. G. Suvorova 'O dvux ponjatijax materii', *UFN* 1952, 48, 623ff.
22. Fridman, V. G.: Ob učenii N'jutona o masse, *UFN* 1957, 61, 451–460.
23. Gaaz, A.: Fizika kak geometričeskaja neobxodimost', *UFN* 1922, 3, 3ff.
24. Gejviš, Ju.: Pol' Lanževen – vydajuščijsja francuzskij fizik-materialist (k vyxodu v svet russkogo perevoda 'Izbrannyx proizvedenii'), *UFN* 1950, 42, 462ff.
25. Gejzenberg, V. (Werner Heisenberg): Otkrytie Planka i osnovnye filosofskie problemy atomnoj teorii, (Translated from *Naturwissenschaften,* Vol. 45, 1958, 227ff.), *UFN* 1958, 66, 163–175.
26. Gell-Mann, M., and Rozenbaum, E. (Rosenbaum): Elementarnye časticy, (Translation of "Elementary Particles", *Scientific American* 1957, 72–88.), *UFN* 1958, 64, 391–416.

27. Institut Filosofii Akademii Nauk SSSR: Klassičeskoe proizvedenie marksistskoj filosofii (From *Pravda,* May 13, 1959), *UFN* 1959, 68, 369–376.
28. Ioffe, A.: K voprosu o filosofskix ošibkax moej knigi 'Osnovnye problemy sovremennoj fiziki', *UFN* 1954, 53, 589ff.
29. Ioffe, A.: Al'bert Ejnštejn (k 5-letiju so dnja smerti), *UFN* 1960, 71, 3–7.
30. Jakobi, K. G.: O žizni Dekarta i ego metode napravljat' um pravil'no i izyskivat' v naukax istinu (Lekcija K. G. Jakobi, pročitannaja v Berline, 3 janv. 1846g.), *UFN* 1918, 1, 165ff.
31. Janoši, L. (L. Jánossy): Dal'nejšie soobraženija o fizičeskoj interpretacii preobrazovanii Lorenca, *UFN* 1957, 62, 149–181.
32. Karpov, M.: Ob amerikanskix potugax propagandirovat' idealizm v SSSR (Iz pisem v redakciju), *UFN* 1951, 44, 316ff.
33. Klemens, G. (G. M. Clemens): Etalony vremeni i častoty, (Translated from *Science,* Vol. 123, 1956, 567ff.), *UFN* 1957, 62, 443–459.
34. Korolev, F.: O metodologičeskix ošibkax v knige prof. S. E. Xajkina 'Mexanika', *UFN* 1949, 37, 388ff.
35. Kravec, T.: Evoljucija učenija ob energii (1847–1947), *UFN* 1948, 36, 338ff.
36. Kuznecov, I. V.: Ob odnom poročnom tolkovanii vtorogo načala termodinamiki (N. V. Kašin: Kurs fiziki dlja učitelskix institutov. T. I, Moscow, Učpedgiz, 1948), *UFN* 1949, 39, 299ff.
37. Kuznecov, I. V.: Sokrovišča russkoj nauki (K vyxodu v svet pervogo toma Polnogo sobranija sočinenij M. V. Lomonosova), *UFN* 1950, 42, 57ff.
38. Kuznecov, I. V.: Protiv idealističeskix izvraščenii ponjatii massy i energii, *UFN* 1952, 48, 221ff.
39. Kuznecov, I. V.: Po povodu pis'ma A. Maksimova v redakciju žurnala 'Uspexi Fizičeskix Nauk' (Pis'mo v redakciju), *UFN* 1953, 49, 498ff.
40. Kuznecov, I. V.: Filosofskie idei Lenina i poznanie prirody, *UFN* 1960, 70, I–XII.
41. Kuznecov, I. V.: Trudy S. I. Vavilova po filosofii i istorii estestvoznanija, *UFN* 1961, 75, 251–258.
42. Laue, M.: O sootnošenijax netočnostej Gejzenberga i ix teoretiko-poznavatel'nom značenii, *UFN* 1935, 15, 343ff.

43. Laue, M.: Pamjati Maksa Planka (Nadgrobnaja reč' Maksa fon Laue, proiznesennaja 7 oktabrja 1947g v Albanikirche v Gettingene), *UFN* 1958, 64, 639–640.
44. Laue, M.: Inercija i energija, (Translation of "Inertia and Energy" in *Albert Einstein: Philosopher-Scientist)*, *UFN* 1959, 67, 721–7·42.
45. Maksimov, A. A.: O stat'e I. V. Kuznecova 'Protiv idealističeskix izvraščenii ponjatii massy i energii', *UFN* 1953, 49, 497ff.
46. Malov, N.: Po povodu obsuždenija ponjatija 'massa', *UFN* 1954, 52, 498ff.
47. Minkovskij, G. (H. Minkowski): Prostranstvo i vremja, (Translation of "Raum und Zeit" in *Physik. Zeitschr.*, Vol. 10, 1909, 104ff,), *UFN* 1959, 59, 303–320.
48. Mizes, R. (R. von Mises): O pričinnoj i statističeskoj zakonomernosti v fizike, *UFN* 1930, 10, 437ff.
49. Ovčinnikov, N.: Obsuždenie doklada I. V. Kuznecova 'Protiv idealističeskix izvraščenii ponjatii massy i energii' na Učenom sovete sektora dialektičeskogo materializma Instituta Filosofii AN SSSR (Kratkij obzor vystuplenii), *UFN* 1952, 48, 263ff.
50. Ovčinnikov, N.: Otvet Ja. P. Terleckomu (Pis'mo v redakciju), *UFN* 1953, 50, 158ff.
51. Plank, M. (Max Planck): Fizičeskaja zakonomernost' v svete novyx issledovanij, *UFN* 1926, 6, 177ff.
52. Plank, M. (Max Planck): Kartina mira sovremennoj fiziki, *UFN* 1929, 9, 407ff.
53. Plank, M. (Max Planck): Naučnaja avtobiografija, (Translation from *Wissenschaftliche Selbstbiographie,* Leipzig 1955), *UFN* 1958, 64, 625–637.
54. Ot Redakcii: K obsuždeniju knigi S. E. Xajkina 'Mexanika', *UFN* 1950, 40, 476.
55. Obzor materialov, polučennyx Redakciej: K obsuždeniju knigi S. E. Xajkina 'Mexanika', *UFN* 1950, 40, 477ff.
56. Ot Redakcii: Vsesojuznoe soveščanie po filosofskim voprosam sovremennogo estestvoznanija, (Followed by text bearing same title from VF 1959, 2), *UFN* 1959, 68, 717–727.
57. Sorokin, V.: Zakon soxranenija dviženija i mera dviženija v fizike, *UFN* 1956, 59, 325ff.

58. Suvorov, S.: Leninskaja teorija poznanija – filosofskaja osnova razvitija fiziki, *UFN* 1949, 39, 3ff.
59. Suvorov, S.: O tak nazyvaemom fizičeskom ponjatii materii, *UFN* 1951, 49, 485ff.
60. Suvorov, S.: O filosofii v učebnike Arcybyševa, *UFN* 1952, 46, 293ff.
61. Suvorov, S.: K voprose o zakone vzaimosvjazi massy i energii, *UFN* 1952, 48, 213ff.
62. Suvorov, S.: Otvet V. G. Fridmanu, *UFN* 1952, 48, 626ff.
63. Suvorov, S.: Ešče raz k voprosu o tak nazyvaemom fizičeskom ponjatii materii (Otvet V. G. Fridmanu), *UFN* 1953, 49, 125ff.
64. Suvorov, S.: Problema 'fizičeskoj real'nosti' v kopengagenskoj škole, *UFN* 1957, 62, 141–159.
65. Suvorov, S.: O roli eksperimenta i teorii v poznanii (k stat'e Maksa Borna), *UFN* 1958, 66, 375–390.
66. Suvorov, S. and Štejman, R. Ja.: Za posledovatel'no materialističeskuju traktovku osnov mexaniki, *UFN* 1950, 40, 407ff.
67. Tamm, I. E.: O stat'e L. Janoši 'Dalnejšie soobraženija o fizičeskoj interpretacii preobrazovanij Lorenca', *UFN* 1957, 62, 183–185.
68. Terleckij, Ja.: Po povodu stat'i N. F. Ovčinnikova 'Obsuždenie doklada I. V. Kuznecova' (Pis'mo v redakciju), *UFN* 1953, 50, 157ff.
69. Vavilov, S.: Lenin i sovremennaja fizika, *UFN* 1944, 26, 113ff.
70. Vavilov, S.: Fizika Lukrecija, *UFN* 1946, 29, 161ff.
71. Vavilov, S.: Atomizm: N'jutona, *UFN* 1947, 31, 1ff.
72. Vavilov, S.: Lenin i filosofskie problemy sovremennoj fiziki, *UFN* 1949, 38, 145ff.
73. Vleduc, G., Nalimov, V., Stjažkin, N.: Naučnaja i texničeskaja informacija kak odna iz zadač kibernetiki, *UFN* 1959, 59, 13–56.
74. Vigner, E. (Eugene Wigner): Relativistskaja invariantnost' i kvantovye javlenija, (Translated from *Reviews of Modern Physics,* Vol. 29, 1957, 255ff.), *UFN* 1958, 65, 257–281.
75. Vol'terra, V. (Voltèrra): Matematičeskaja teorija bor'by za suščestvovanie, *UFN* 1928, 8, 13ff.
76. Xajkin, S.: O metodologičeskix nedostatkax moego učebnika 'Mexanika' (Pis'mo v redakciju), *UFN* 1950, 40, 483ff.

REPORT FROM THE INSTITUTE

Appointments. J. Watts as lecturer in Russian. Professor L. Révész as lecturer in History and Organization of the Communist Party. Professor R. De George as Assistant at the Institute. Professor L. Hackstaff has left the Institute to teach at Wabash College, Crawfordsville, Indiana.

Lecture Courses. The first year of lecture courses at the Institute was completed on July 20, 1962. During the winter semester 22 students were enrolled, and 21 during the summer semester.

Conferences Abroad. Dr. T. J. Blakeley taught at the Summer Session of Georgetown University at Salzburg, Austria. Prof. J. M. Bocheński, Dr. H. Fleischer and Prof. S. Müller-Markus continued teaching Soviet philosophy at the Ost-Kolleg in Cologne.
Prof. Bocheński lectured at the University of Cologne on July 11, 1962.

Publications. The third volume of the *Bibliographie der sowjetischen Philosophie* has been published in the "Sovietica" series.

A SPECIAL CURRICULUM IN PHYSICS AND PHILOSOPHY

The Institute will offer a special course for physicists of study in Sovietology, philosophy, and physics, beginning in the Winter semester of 1962. The curriculum includes

Systematic philosophy
History of philosophy
Mathematical logic
Methodology of science
Russian
Dialectical and historical materialism
Soviet philosophy of science
Basic problems of modern physics.

The purpose of the special course is to prepare specialists in Soviet philosophy and science for university teaching, for the diplomatic service as scientific attachés, and for management as Soviet area experts.
The course covers a maximum of six semesters and may terminate with a

diploma in Sovietology, and in special cases, with a doctorate in philosophy. Applications should be sent, together with *curriculum vitae,* transcripts and two letters of reference, to the Director of the Philosophy of Physics Division, The Institute of East European Studies, 1a Rue de l'Hôpital, Fribourg, Switzerland.

The lectures begin on the 17*th of October,* 1962.

PHYSIKALISCH-PHILOSOPHISCHES SONDERSTUDIUM

Das Osteuropa-Institut Freiburg/Schweiz wird ab Wintersemester 1962 vornehmlich für Physiker ein Sonderstudium in Sowjetologie, Philosophie und Physik einrichten. Das Studium umfaßt

Systematische Philosophie
Geschichte der Philosophie
Mathematische Logik
Methodologie der Naturwissenschaften
Russische Sprache
Dialektischer und historischer Materialismus
Sowjetische Philosophie der Naturwissenschaften
Grundlagenprobleme der modernen Physik.

Ziel des Studiums ist die Vorbereitung von Kennern der sowjetischen Philosophie und Naturwissenschaft für die Hochschullaufbahn, für den diplomatischen Dienst als Wissenschafts-Attachés und für die Wirtschaft als Ost-Experten.

Das Studium umfaßt maximal sechs Semester und kann mit einem Diplom in Sowjetologie, in besonderen Fällen mit der Promotion in Philosophie, abgeschlossen werden.

(Für westdeutsche Bewerber mit Hochschuldiplom in Physik und besonderer wissenschaftlicher Qualifikation ist eine begrenzte Zahl von Stipendien zugänglich. Die Höhe des Stipendiums entspricht dem Gehalt eines Wissenschaftlichen Assistenten).

Bewerbungen mit Lebenslauf, Zeugnissen und zwei Referenzen sind zu richten an den Leiter der Abteilung Philosophie der Physik, Osteuropa-Institut, Freiburg, Schweiz, 1a, Rue de l'Hôpital.

Vorlesungsbeginn 17. *Oktober* 1962.

STUDIES IN SOVIET THOUGHT

A QUARTERLY OF THE INSTITUTE OF EAST-EUROPEAN STUDIES

AT THE UNIVERSITY OF FRIBOURG / SWITZERLAND

VOLUME II No. 4 DECEMBER 1962

H. Fleischer Auf dem Bauplatz der materialistischen Dialektik

S. Müller-Markus Zum Anschaulichkeitsproblem in der Quantenmechanik

D. D. Comey Marxist-Leninist Ideology and Soviet Policy

Notes and Comments

Logic, Dialectical and Other – Quotationism – On Ideology – Hungary – Bulgaria – A Discrepancy – Two Personal Notes (J. M. Bocheński and Sidney Hook) – Varia

Reviews

L. V. Vorob'ev, V. M. Kaganov, A. E. Furman: Osnovnye kategorii i zakony materialističeskoj dialektiki (H. Fleischer)

I. I. Novinskij: Ponjatie svjazi v marksistskoj filosofii (H. Fleischer)

Zbigniew K. Brzezinski: Ideology and Power in Soviet Politics (D. D. Comey)

Chronology (1962)

Report from the Institute

A Note to Western Authors

Volume II, 1962

Index of Names

Index of Subjects

Table of Contents

This content downloaded from 142.66.3.42 on Mon, 29 Aug 2016 20:37:24 UTC
All use subject to http://about.jstor.org/terms

ABBREVIATIONS

AN	Akademija nauk (of SSSR unless otherwise specified)
AON	Akademija obščestvennyx nauk pri CK KPSS
CK KPSS	Central'nyj komitet kommunističeskoj partii sovetskogo sojuza
FN	Naučnye doklady vysšej školy. Filosofskie nauki
IF	Institut filosofii AN
IIL	Izdatel'stvo inostrannoj literatury
LGU	Leningradskij gosudarstvennyj universitet
MGU	Moskovskij gosudarstvennyj universitet
SSSR	Sojuz sovetskix socialističeskix respublik
VF	Voprosy filosofii
VPŠ	Vyssaja partijnaja škola
VUZ	Vysšoe učebnoe zavedenie (and its plural)

TRANSLITERATION SYSTEM

Russian Letter *Cap. Ital.*	Studies in Soviet Thought	U.S. Library of Congress	Russian Letter *Cap. Ital.*	Studies in Soviet Thought	U.S. Library of Congress
А *а*	a	a	Р *р*	r	r
Б *б*	b	b	С *с*	s	s
В *в*	v	v	Т *т*	t	t
Г *г*	g	g	У *у*	u	u
Д *д*	d	d	Ф *ф*	f	f
Е *е*	e	e	Х *х*	x	x
Ё *ё*	ë	ë	Ц *ц*	c	c
Ж *ж*	ž	ž	Ч *ч*	č	č
З *з*	z	z	Ш *ш*	š	š
И *и*	i	i	Щ *щ*	šč	šč
Й *й*	j	j	Ъ *ъ*	″	″
К *к*	k	k	Ы *ы*	y	y
Л *л*	l	l	Ь *ь*	′	′
М *м*	m	m	Э *э*	é	é
Н *н*	n	n	Ю *ю*	ju	ju
О *о*	o	o	Я *я*	ja	ja
П *п*	p	p			

Note: Articles in German will use 'ch' in place of 'x'. Commonly used proper names retain the form which is ordinary in English or German – e.g. Trotsky, Khruschov, etc.

This content downloaded from 142.66.3.42 on Mon, 29 Aug 2016 20:37:24 UTC
All use subject to http://about.jstor.org/terms

HELMUT FLEISCHER

AUF DEM BAUPLATZ DER MATERIALISTISCHEN DIALEKTIK

Lange Jahre hindurch konnte es scheinen, als sei die 'materialistische Dialektik' oder, wie man mit Vorliebe sagte, die 'marxistische dialektische Methode', ein unwandelbarer Kanon sorgsam gehüteter Lehrsätze, die lediglich 'Aneignung' und 'schöpferische Anwendung' verlangten, um als universaler Schlüssel zur Lösung aller fundamentalen und speziellen Erkenntnisprobleme in allen Bereichen dienen zu können. Seit dem Ende des Stalinkults ist jedoch einige Bewegung in die Formelwelt der materialistischen Dialektik gekommen; man kann zwar nicht sagen, sie sei schon zu einem 'Kampffeld' geworden – obgleich es auch an Kontroversen, mitunter recht scharfen, nicht fehlt – jedenfalls aber ist sie zu einem Arbeitsfeld geworden, auf dem das philosophische Bemühen um die Lösung von Problemen reichliche Betätigung findet.

Nach der Bloßstellung des philosophischen Elends der Stalin-Kommentatorik war eine Neufassung der Diamat-Lehre und auch ein neues Durchdenken vieler Einzelfragen nötig geworden. Die sowjetische Philosophie hat in der Arbeit an diesen beiden Aufgaben, der Synthese und der Analyse, eine Menge neuer Gedanken zutage gefördert. Verhältnismäßig leicht ist es, den Bemühungen um eine neue Systematik zu folgen, die sich in einer Reihe von Gesamt- und Gebietsdarstellungen des Diamat beziehungsweise seiner Hauptlehrstücke und in einer Anzahl programmatischer Arbeiten dokumentieren. Immer schwieriger wird es dagegen, den Gang und den Ertrag der verzweigten analytischen Kleinarbeit im Auge zu behalten, die sich in den vielen monographischen Untersuchungen von recht unterschiedlichem Format und Wert entfaltet. Wir müssen uns in den folgenden Betrachtungen damit begnügen – vom Äußerlichen zum Zentrum der Begriffs- und Theoriebildung vordringend – aus dem Ganzen eine Reihe von Problemen herauszuheben, die zum Teil den selbständig arbeitenden sowjetischen Philosophen selbst bereits zum Bewußtsein gekommen sind, zum anderen Teil solche, von denen wir meinen, daß man ihnen in Zukunft vermehrte Aufmerksamkeit schenken sollte.

Studies in Soviet Thought II, 4 (December 1962) © *D. Reidel, Dordrecht-Holland*

HELMUT FLEISCHER

MATERIALISTISCHE DIALEKTIK UND DIALEKTISCHER MATERIALISMUS

Die Systematiker des Diamat haben in den letzten Jahren eine Reihe von Strukturproblemen im Bereich der philosophischen Grundlehre aufgeworfen und mit sehr unterschiedlichen Lösungsversuchen eine Diskussion in Gang gebracht, die immer mehr auf verbindliche Entscheidungen hindrängt.

Man ist in den neueren Lehrtexten allgemein dazu zurückgekehrt, an den Anfang eine Darlegung des Materialismus zu setzen, d.h. die Thesen über die Materialität der Welt, die Bewegtheit der Materie, die Mannigfaltigkeit ihrer Arten und Bewegungsformen und schließlich über das Bewußtsein als Eigenschaft der höchstorganisierten, genetisch aus den niedrigeren entstandenen Materie-Art. Darauf folgt die Dialektik als die Lehre vom Zusammenhang, von der Entwicklung und den allgemeinsten Entwicklungsgesetzen alles Seienden (Natur, Gesellschaft, Denken). Den Abschluß bildet eine Skizze der Erkenntnistheorie. Man ist (bis auf einige Nachzügler, die noch immer Stalins Version wiederholen) davon abgerückt, die Dialektik als die 'Methode' und den Materialismus als die weltanschauliche 'Theorie' zu deklarieren und erkennt an (wie es die Kritik schon seit langem geltend gemacht hatte), daß auch die Dialektik mit ihren Aussagen über Zusammenhang und Entwicklung in der Welt ein Element der 'Theorie' bildet und hierin dem Materialismus-Lehrstück völlig homogen ist. Differenzen bestehen zwischen den Lehrtexten hauptsächlich darin, wie sie mit einer Reihe meist paarweise geordneter 'Kategorien' (Wesen – Erscheinung, Inhalt – Form, Möglichkeit – Wirklichkeit u.a.) verfahren; die *Osnovy marksistskoj filosofii* haben sie in mehr oder weniger geeignete thematische Zusammenhänge (Lehre vom universellen Zusammenhang, Grundgesetze der Dialektik, Erkenntnistheorie) eingegliedert, während die anderen Kompendien aus ihnen einen Anhang machen, der den drei Grundgesetzen auf reichlich unorganische Art angegliedert ist.

Die weitgehende Einheitlichkeit in der Struktur der Lehrtexte läßt jedoch nicht auf volle Einmütigkeit in der Entscheidung der fundamentalen Strukturprobleme im Bereich der Grundlehre schließen. Eine Reihe von Streitfragen ist offenbar geworden: neben Autoren, die eine Aufteilung dieser Grundlehre in eine Mehrzahl von Lehrstücken (Materialismus,

Dialektik) und Disziplinen (Ontologie, Erkenntnistheorie, Logik) für ganz normal halten, gibt es andere, die – manchmal mit größtem Nachdruck – die Konzeption einer einheitlichen Philosophie verfechten, in der entweder eine dieser Gliederungen oder gar beide aufgehoben sind. Sehr radikal in ihren Einheitsbestrebungen sind Autoren wie P. V. Kopnin und V. I. Čerkesov, die nicht nur 'materialistische Dialektik' und 'dialektischen Materialismus' als Synonyme gelten lassen, sondern darüber hinaus (gemäß einer umstrittenen Direktive Lenins) eine strenge 'Identität' oder ein 'Zusammenfallen' *(sovpadenie)* von Dialektik, Logik und Erkenntnistheorie proklamieren [1]; die Idee, auf dem Boden des Diamat eine eigene Ontologie zu etablieren (wie es u.a. M. N. Rutkevič in seinen Diamat-Lektionen angedeutet hat), erscheint solchen Philosophen als ein anachronistischer Rückfall in vorkantische Zeiten. [2]

Weniger weit gehen solche sowjetische Philosophen wie V. P. Tugarinov und V. P. Rožin, deren methodologische Überlegungen auf eine Aufhebung oder Reduktion des Dualismus von 'Materialismus' und 'Dialektik' hinauslaufen. Tugarinov ordnet die Gesamtheit der Kategorien und Aussagen des Diamat einem dreigliedrigen Schema von substantiellen, attributiven und relationalen Kategorien ein [3], während Rožin das Dialektische und das Materialistische als zwei 'Seiten' *(storony)* von vier Lehrstücken (Naturphilosophie, Soziologie, Logik und Erkenntnistheorie) konzipiert. [4]

Wir wollen hier nicht in eine Diskussion dieser Strukturprobleme eintreten und brauchen darum auch die verschiedenen Positionen sowjetischer Autoren nicht bis in ihre Details zu verfolgen. Es sei lediglich bemerkt, daß die radikalen Einheitsbestrebungen, die eine Aufhebung der traditionellen philosophischen Disziplinen zum Ziel haben, wenig Aussicht auf Erfolg haben dürften; man wird aus verschiedenen Gründen den Disziplinen eine 'relative Eigenständigkeit' belassen und ihre Einheit so realisieren müssen, daß man den thematischen Überschneidungen und dem gegenseitigen Begründungszusammenhang die gebührende Beachtung schenkt. Besser sind die Erfolgsaussichten derer, die sich die Überwindung der Grenzlinie zwischen 'Materialismus' und 'Dialektik' vorgenommen haben. Sie ist in der Tat der Grund mancher Widersinnigkeiten in der heutigen Architektur des Diamat-Systems. Durch sie gerät thematisch eng Zusammengehöriges oft in weite Ferne voneinander, Spezielles rangiert vor dem Elementaren, Partielles erfährt eine unge-

rechtfertigte Hervorhebung. Man proklamiert zwar einheitliche (obgleich nicht durchwegs harmonierende) Methodenprinzipien für den Aufbau des Systems – das Prinzip des 'Aufstiegs vom Abstrakten zum Konkreten' und das der 'Einheit des Logischen und des Historischen' – doch praktisch befolgt man keines von ihnen. So gleichen die heutigen Gesamtdarstellungen des Diamat eher einer Rhapsodie als einem wirklichen System und die Systematiker werden sich vor zahlreiche Reorganisationsaufgaben gestellt sehen, auch vor solche, die bisher noch nicht in den Blick gekommen sind.

DAS THEMA DER MATERIALISTISCHEN DIALEKTIK

Nach den (von Engels übernommenen) Definitionen könnte es scheinen, als sei 'Dialektik' lediglich zum Namen für einen bestimmten thematischen Bezirk der philosophischen Grundlehre geworden – nämlich für jene Überlegungen, die um Zusammenhänge, Entwicklungen und ihre Gesetze kreisen. Das trifft jedoch durchaus nicht zu; auch in der materialistischen Dialektik bezeichnet man mit dem Begriff des 'Dialektischen' vor allem eine bestimmte strukturelle Charakteristik, die den Zusammenhängen und Entwicklungen sowie den sie erfassenden Begriffen und Gedankengängen eignet. Da es aber eben nicht nur 'das Dialektische' in diesem Sinne, sondern auch 'die Dialektik' als ein thematisch bestimmtes Lehrstück gibt, ist es unumgänglich, sich von ihrem besonderen Gegenstande Rechenschaft zu geben.

Mit der geläufigen Interpretation der Dialektik (a) als der Lehre von den Zusammenhängen und (b) von der Entwicklung mitsamt ihren allgemeinsten Gesetzen ist offenbar ein weiterer und ein engerer Kompetenzbereich abgesteckt: geht man vom Titelbegriff des 'Zusammenhangs' aus, dann fällt in den Kompetenzbereich der Dialektik die Gesamtheit der allgemeinen Aussagen über das Strukturelle der Welt; jenseits davon (oder als Prämisse) bliebe einzig die Feststellung, daß Strukturen – Gefüge von Zusammenhängen und Relationen – nicht 'für sich' bestehen, sondern Strukturen 'von etwas' sind, nämlich Strukturen eines materiellen Substrats. Man kann dann natürlich auch umgekehrt verfahren und sagen, alle Feststellungen der Dialektik über die Gesamtstruktur und die mannigfachen Einzelstrukturen des Seienden sind nur eine Explikation des Begriffs der Materie. Die Unterscheidung von Materialismus und

Dialektik entspräche dann dem Typenunterschied zwischen Substratkategorien und Relations- oder Strukturkategorien, doch die gegenseitige Durchdringung wäre so vollständig, daß von einer Konstruktion zweier Lehrstücke nicht die Rede sein könnte.

In der praktischen Durchführung ist man jedoch nicht so folgerichtig vorgegangen. Nicht nur unter dem Titel der Dialektik, sondern auch unter dem des Materialismus handelt man Zusammenhänge und Strukturprobleme ab – so die Raum-Zeit-Struktur, die Typologie der Materie-Arten und Bewegungsformen; ja einige Systematiker sind sogar schon dazu übergegangen, die 'dialektischen' Prinzipien des universellen Zusammenhanges, der Gesetzmäßigkeit und selbst der Entwicklung schon in den Materialismus-Abschnitten ihrer Darstellungen zur Sprache zu bringen.[5] Das zeigt, wie sehr die übliche Grenzziehung eine Sache der Konvention, nicht aber einer systematischen Logik ist.

Auch wenn man den Kompetenzbereich der Dialektik enger faßt und ihr eigentlichstes Thema in einer bestimmten Art von Zusammenhängen, nämlich in den *genetischen* Zusammenhängen der 'Entwicklung' (Übergängen von niederen zu höheren Organisationsstufen) sieht, hat man noch keine thematische Einheit gewonnen, sondern nur ein partielles Moment der allgemeinen Dynamizität des Realen (der Materie) gewissermaßen mit der Lupe 'herausvergrößert'. Diese Prozedur hat bisher in der Regel nur zur Folge gehabt, daß die Problematik des materiellen Substrats und die Problematik der nicht unmittelbar evolutiven Struktur- und Prozeßmomente in sträflicher Weise vernachlässigt blieb; die ontologische Lehre des Diamat leidet infolgedessen an einer augenfälligen inneren Disproportionalität. Für die Charakteristik 'materieller Objekte' hat man meist nur die der Alltagssprache entnommenen und durchaus unzulänglichen Ausdrücke 'Dinge und Erscheinungen' parat; die Analyse der Materie-Arten und Bewegungsformen – ein ganz fundamentales Problem – schrumpft zu einer oberflächlichen Aufzählung zusammen; erstrangige Kategorien des modernen wissenschaftlichen Weltverständnisses wie die des 'dynamischen Systems' haben in den Kompendien noch nicht den ihnen gebührenden Platz gefunden usw. usf.

Was die innere Organisation des Dialektik-Lehrstücks angeht, so herrscht in der sowjetischen Literatur ein erstaunlicher Konservativismus. Man scheint es für ein unumstößliches Axiom zu halten, daß als das Kernstück der Dialektik jener Kodex aus drei 'allgemeinsten Grundgesetzen jeg-

licher Entwicklung', den einst Engels zusammengestellt hat, figurieren müsse. Es sind die folgenden (ihre heutige Titulatur weicht von der Engelsschen etwas ab): (1) das Gesetz des umschlagend quantitativer Veränderungen in qualitative, (2) das Gesetz der Einheit und des Kampfes der Gegensätze und (3) das Gesetz der Negation der Negation. Diesem Kernstück schickt man stets eine generelle Charakteristik des universellen Zusammenhanges der Dinge und Erscheinungen, meistens auch der Entwicklung, voraus; gelegentlich gliedert man der Charakteristik des Zusammenhanges auch die Reihe der Determinations- und Modalkategorien (Kausalität, Finalität, Gesetz, Notwendigkeit, Möglichkeit, Zufall) ein. Doch außer diesen Kategorien und jenen anderen, welche die 'Grundgesetze' fundieren (Qualität, Quantität, Maß, Sprung, Widerspruch, Gegensatz, Negation), gibt es noch die 'anderen Kategorien der Dialektik', deren Einordnung (wie schon erwähnt) Schwierigkeiten bereitet. Die meisten Lehrbuch-Autoren (und ihnen folgend auch die Programme der Hochschulkurse im Diamat) haben hier, wie uns scheint, den schlechtesten Weg gewählt und setzen diese Kategorien, unter Mißachtung jeder thematischen Einheit in Paare gruppiert, hinter die drei Grundgesetze – und zwar (was ganz widersinnig ist) als ihre 'Konkretisierung und Ergänzung'.

Hier hilft, so meinen wir, nur eine ganz radikale Kur: dieses ganze Aussagen-Konglomerat in seine Einzelbestandteile zu zerlegen und von Grund auf neu zu überlegen, welche systematische Ordnung einer ontologischen Lehre vom Aufbau der Gebilde, Systeme und Prozesse der realen Welt angemessen ist. Man sollte sich dabei auch nicht auf eine bloße Umgruppierung des derzeitigen thematischen Bestandes der *Dialektik* beschränken, sondern auch das Aussagenmaterial des Materialismus-Lehrstücks in die Neuverteilung einbeziehen, um einen methodisch einheitlichen Aufbau zu verwirklichen.[6]

SEMANTISCHE ARBEIT AN DEN KATEGORIALEN TERMINI

Die Probleme der thematischen Strukturierung der philosophischen Grundlehre sind gewiß nicht die gewichtigsten; man kommt nur am frühesten – nämlich schon bei der ersten Annäherung, beim Blick in die Inhaltsverzeichnisse – mit ihnen in Berührung. Im Inneren trifft man dann auf jene anderen Probleme, die mit der inhaltlichen Tragfähigkeit der

Diamat-Philosophie zusammenhängen, mit dem Verhältnis der Aussagen zu ihrem Gegenstand. Es lassen sich hier verschiedene Problemschichten und -gruppen unterscheiden, von denen wir einige betrachten wollen. Bevor wir aber auf die weitläufigeren Aussagenkomplexe zu sprechen kommen, wollen wir uns mit dem Repertoire an kategorialen Termini befassen, die alle jene Aussagen fundieren. Kritisch gewendet: es geht um die Frage nach der Suffizienz, der genügenden Präzision, Differenzierung und Vollständigkeit dieses Repertoires.

Es ist nicht zu übersehen, daß die sowjetische Philosophie nach Jahren einer extremen Nachlässigkeit nunmehr den Problemen der kategorialen Semantik, wie wir die Bedeutungsanalysen im Bereich der kategorialen Termini kurz nennen wollen, eine wachsende Aufmerksamkeit widmet. Das Streben nach Präzisierung ist fast allgemein geworden, wenngleich es sich, wie V. P. Tugarinov kritisch bemerkt, nicht immer auf eine wirklich fruchtbringende Weise betätigt.[7] Es gibt kaum eine Kategorie, an der man nicht bereits semantische Betrachtungen angestellt hätte, mitunter auch solche, die einen nennenswerten Einfluß auf wichtige Aussagen der Theorie haben. Fortschritte sind insofern erzielt worden, als man an zahlreichen Kategorien soundsoviele Bedeutungsmomente oder Bedeutungsvarianten sichtbar gemacht und dadurch auch eine reichere Differenzierung in die entsprechenden Aussagen gebracht hat. So nimmt man heute z.B. die Worte 'Bewegung, Veränderung und Entwicklung' nicht mehr allgemein und unbesehen als Synonyme, desgleichen Kausalität und Gesetzlichkeit; man hat eine elastischere Typologie qualitativer Veränderungen konzipiert, man unterscheidet weithin zwischen ontologischen und gnoseologischen (auch logischen und methodologischen) Aspekten, hat mit einer differenzierenden Analyse der Seinsweisen (des Materiellen, Ideellen, Realen) begonnen. In manchen Fällen – so bei der Behandlung des Kausalzusammenhanges – hat die analytische Differenzierung des Problems bereits den international üblichen Standard erreicht. Manche der dogmatischen Aburteilungen, die man in den Lehrtexten findet (z.B. der 'Kreislauftheorie' und der 'Gleichgewichtstheorie') werden im Lichte der spezielleren Untersuchungen problematisch.

Dennoch scheint uns, daß im Felde der kategorialen Semantik auch heute noch vieles im argen liegt, und zwar auch in ausgesprochen zentralen Partien der Lehre wie z.B. in der Theorie von den 'Widersprüchen' und vom 'Kampf der Gegensätze', also im 'Kern der Dialektik' (wie man

diesen Themenkomplex im Anschluß an Lenin zu nennen pflegt). Es gibt hierüber eine langwierige Diskussion, in deren Mittelpunkt die sozialtheoretischen Implikationen der Widerspruchstheorie, namentlich die 'Widersprüche' der sozialistischen Gesellschaft, stehen. Doch einige ganz fundamentale Klärungen sind bislang versäumt worden und so bilden die Aussagen der meisten Lehrtexte über die dialektische Widersprüchlichkeit und Gegensätzlichkeit in der Welt ein wirres Knäuel aus unanalysierten und überaus heterogenen Bestandstücken. Weil die These von der 'Widersprüchlichkeit' des Seienden für das dialektische Denken so eminent wichtig ist, haben die marxistischen Philosophen besonders eifrig daran gearbeitet, einen möglichst stattlichen Katalog von Fällen des Widerspruchs aus allen Ecken und Enden des Weltgefüges zusammenzutragen. Die *Osnovy marksistskoj filosofii* präsentieren unter anderem die folgenden: Positives und Negatives, Nordpol und Südpol, Licht und Schatten, Attraktion und Repulsion, Plus und Minus, Gut und Böse, Schönes und Häßliches.[8] Wollte man es genau nehmen und auf alle derartigen Gegensatzpaare die generellen Feststellungen beziehen, die man anderwärts vom Widerspruch trifft – z.B.: 'Widersprüche werden nur im Kampf und auf dem Wege des Kampfes gelöst'[9], so käme vollendeter Unsinn heraus: Kampf des Lichtes mit dem Schatten, des Nordpols gegen den Südpol, der positiven gegen die negativen Zahlen, der Schönen gegen die Häßlichen und dergleichen mehr.

Die semantische Analyse steht angesichts dieser grotesken Unordnung vor einer wahren Herkulesaufgabe. Zu leisten ist, um es kurz anzudeuten, folgendes: aus dem Konglomerat heterogener Beispiele der 'Widersprüchlichkeit' ist eine mehrdimensionale Typologie zu bilden, in der Klarheit darüber besteht, (a) welche 'Widerspruchs'-Effekte dem Seienden selbst angehören und welche von ihnen auf Eigentümlichkeiten unserer Begriffsbildung zurückgehen; (b) an welchen kategorialen Momenten des Seienden der 'Widerspruch' haftet: an der dynamischen Beziehung zwischen konkreten, substantiellen Gebilden, an einzelnen ihrer statischen oder dynamischen Eigenschaften – etwa am Richtungsmoment ihrer inneren und äußeren Prozesse, an ihrer funktionellen Bedeutung in diesen oder jenen Bezugssystemen o.a. Das festzustellen ist darum so wichtig, weil 'Kampf' oder etwas ihm Analoges eben nur zwischen konkreten substantiellen Einheiten möglich ist; entgegengesetzte Eigenschaften bekämpfen einander nicht. Es wird sich dabei als nötig erwiesen, auch

bestimmte terminologische Differenzierungen einzuführen und streng einzuhalten. Wir denken insbesonders an die Unterscheidung zwischen Verhältnissen des *'Widerspruchs'* – ontologisch richtiger wäre wohl der Ausdruck *'Widerstreit'* als Oberbegriff für alle Arten der dynamischen Kollision, der Spannung, des Konflikts – und den Verhältnissen des *'Gegensatzes'*, worunter man lediglich eine strukturelle Charakteristik zu verstehen hat, die keinerlei dynamische Spannung involviert (positive und negative Zahlen widerstreiten einander nicht, ebensowenig Assoziation und Dissoziation der Atome, nicht einmal Assimilation und Dissimilation im Organismus). Unterläßt man diese Unterscheidungen, so gewinnen die Eigenschaften, Relationen und Strukturen – und ganz unversehens auch die Begriffe von ihnen – ein seltsames Eigenleben und werden, obgleich es eigentlich nur abstrakte Momente sind, zu Agenten einer 'dialektischen' Dynamik, die man sonst – etwa bei Hegel – kurz 'idealistisch' zu nennen pflegt. Es gibt in der sowjetischen Literatur eine Fülle von Beispielen einer solchen 'Verdinglichung' von *abstractis*, die nun auf einmal als agierende und erzeugende Mächte fungieren.[10]

Wenn man schon, um Verhältnisse des Widerstreites und des Gegensatzes zu bezeichnen, den Namen 'Dialektik' liebt, dann sollte man auf jeden Fall einen Unterschied zwischen heterogenen Typen von Dialektik machen. Die fundamentale Gliederung scheidet – ohne sie im Namen der 'Widerspiegelungs'-Theorie voreilig miteinander zu parallelisieren [11] – die *Dialektik der Reflexionssphäre* (der Auffassungsweise und Begriffsbildung) von der *Realdialektik*. Im ersten Bereich wird man auch noch damit zu tun haben, die durch Launen der Wortwahl etc. zustandekommende *Schein-* oder *Verbaldialektik* von der echten *kategorialen Dialektik* zu unterscheiden; im zweiten, primär-ontologischen Bereich ergibt sich noch einmal eine Disjunktion von *Gegensatz-Dialektik* (z.B.: Einheit von Assimilation und Dissimilation im Organismus) und *Widerstreit-Dialektik* (z.B.: Konfliktsituationen zwischen Organismen, zwischen sozialen Gruppen). – Damit ist nur exemplarisch und fragmentarisch eines unter vielen aktuellen und ungelösten Problemen der kategorialen Semantik im Diamat herausgegriffen.

DIE FORMULIERUNG DER DIALEKTISCHEN GRUNDGESETZE

Wie die sowjetischen Philosophen mit großem Nachdruck (und nicht

ohne eine gewisse Einseitigkeit) erklären, besteht die Aufgabe der Wissenschaft und auch der Philosophie als Wissenschaft darin, die *Gesetze* der objektiven Welt zu erkennen; der Philosophie obliegt es, aus den speziellen Einsichten der Einzelwissenschaften von der Natur, von der Gesellschaft und vom Denken jene fundamentalen Ordnungsrelationen herauszuheben, die den Objekten aller dieser Wissenschaften und somit dem Seienden überhaupt eigen sind. Im Interesse der Diamat-Philosophie nehmen dabei die *Entwicklungsgesetze* einen besonderen Rang ein – es ist allerdings nicht immer ganz klar, ob man es nur mit Gesetzen der Entwicklungsvorgänge oder mit Gesetzen jeglicher Bewegung und Veränderung zu tun hat. Engels folgend, hat man drei Gesetze als 'Grundgesetze' nominiert; von den Gesetzesbeziehungen, in welche die anderen Kategorien involviert sind (z.B. 'Ursache und Wirkung', 'Inhalt und Form' usw.), sagt man demgemäß – nicht eben sinnvollerweise –, sie seien 'nicht-grundlegend', doch nicht weniger universell als die Grundgesetze.

Es muß naturgemäß von größtem philosophischem Interesse sein, wie diese Gesetze, namentlich die grundlegenden, formuliert sind, was sie als wesensnotwendig zu jedem Entwicklungsvorgang gehörig aussagen. Man möchte auch erwarten, daß die sowjetischen Philosophen nach der 'Rehabilitierung' dieser Engelsschen Gesetze (bis 1953 hatte man die Dialektik bekanntlich nach den vier Stalinschen 'Grundzügen' gegliedert) einige Anstrengungen unternommen hätten, um diese Gesetze möglichst genau und vollständig zu formulieren. Und tatsächlich hat man über ihren Aussagesinn viel nachgedacht und eine Reihe neuer Feststellungen getroffen. Doch für die eigentliche Formulierung der Gesetze, d.h. die prägnanten Kurzformeln, in die man Gesetze gewöhnlich faßt, hatte diese Arbeit einen recht unerwarteten Effekt: statt sich immer mehr zu konzentrieren, verflüchtigt sich der Aussagegehalt der Grundgesetze immer mehr, um schließlich zu einem weitläufigen Komplex von Deskriptionen soundsovieler disjunktiver Schemata möglicher Prozeßabläufe zu werden. In den *Osnovy marksistskoj filosofii* hat man sich noch darum bemüht, die Gesetze in Kurzformeln zu fassen.[12] Doch in den anderen, später erschienenen Diamat-Kompendien findet man solche Kurzformeln bereits nicht mehr. Einige Autoren und Autorengruppen kündigen die Gesetze zwar in den zugehörigen Kapitelüberschriften noch an, bei der Durchführung hat sich die Gesetzesmaterie jedoch in Einzelaussagen

aufgegliedert, die anscheinend schon nicht mehr ein Modell, sondern mehrere Modelle charakterisieren.[13] Die formale Konsequenz zieht schließlich M. N. Rutkevič, der seine Kapitel erst gar nicht mit den Namen einzelner Gesetze überschreibt, die nirgends als solche formuliert sind, sondern lediglich die drei thematischen Komplexe nennt, zu denen sich die Aussagen gruppieren: Quantität und Qualität, progressive Entwicklung und ihre Gesetzmäßigkeiten, Einheit und Kampf der Gegensätze.[14]
Darin kann man wohl einen Fortschritt in der Entdogmatisierung der Lehre sehen, besonders wenn man bedenkt, mit welchem Starrsinn einst Stalin dem Weltlauf seine Formen und Rhythmen vorgeschrieben hatte. Im Grunde ist auch jene Fassung, die man den Grundgesetzen in den *Osnovy* gegeben hat, durch eine Reihe von Spezifikationen und Differenzierungen bereits überholt. Man möchte nur wünschen, daß die Revision mit aller Strenge und Konsequenz weitergeht und sich auch durch den Traditionalismus der Klassiker-Verehrung nicht behindern läßt. Die Widerstände gegen Neuerungen sind im Bezirk der dialektischen Grundgesetze allerdings besonders stark. So wendet sich G. M. Gak sehr entschieden gegen jene Kollegen, die nach einer Umformulierung von Grundgesetzen verlangen. Diese Gesetze sind kraft ihrer Universalität absolut und ewig, und diesem ihrem Inhalt entspricht auch die Form ihres Ausdrucks; darum sind hier weder Hinzufügungen noch Abstriche berechtigt – es sei denn, daß man da und dort ein Wort durch ein anderes, gleichbedeutendes ersetzt.[15] So etwas klingt angesichts der eben besprochenen Sachlage recht verwunderlich.
Die Formulierung universeller Struktur- und Entwicklungsgesetze alles Seienden ist eine verantwortungsvolle Aufgabe, die höchste Anforderungen an die Umsicht des Philosophen und namentlich auch an seine Fähigkeit zu kluger Zurückhaltung stellt. In einem solchen Arbeitsbereich muß die Offenheit für neue Einsichten und die Bereitschaft zur permanenten Revision des einmal Angenommenen oberstes Grundgesetz sein. Denn allzu groß ist bekanntlich die Versuchung, regional gültige Prinzipien für universell zu halten.

DIE UNIVERSALITÄT DER DIALEKTISCHEN GRUNDGESETZE

Wenn man die Formulierungen der dialektischen Grundgesetze und viele ihrer Kommentierungen in der sowjetischen Literatur überblickt, so wird

man schon an der Wortwahl erkennen, daß bei ihrer Konzeption menschlich-gesellschaftliche Tatbestände als Modell gedient haben müssen. So spricht das Kerngesetz vom 'Kampf' der Gegensätze (obwohl dieses Wort ein spezifisch gesellschaftliches Phänomen und allenfalls noch ein Phänomen der organischen Natur bezeichnet, im Hinblick auf die weite anorganische Natur jedoch nur eine Metapher sein kann); noch deutlicher wird es bei der Beschreibung der dialektischen Negation, die keine 'nackte, leichtfertige' sein, sondern das 'Positive' der früheren Stadien bewahren soll.

Man brauchte um die Worte auch nicht zu streiten, wenn die dialektischen Gesetzesformeln in der Sache wirklich ein Allgemeines in der Veränderung und Entwicklung jeglicher Region des Seienden träfen. So, wie sie in der sowjetischen Literatur formuliert und kommentiert sind, möchte man ihnen dies jedoch nicht ohne weiteres zubilligen. Offensichtlich ist zunächst nur, daß in ihnen gewisse Aspekte der Evolution von Gesellschaftsformationen (namentlich von solchen mit Klassenantagonismen) formalisiert sind: im Quantität-Qualitäts-Gesetz die Korrelation zwischen vorbereitenden Evolutionen und revolutionären Entscheidungen, im Gesetz der Einheit und des Kampfes der Gegensätze die Zuspitzung des Klassenkonflikts bis zur 'letzten Schlacht', im Gesetz der Negation der Negation das Moment der partiellen Kontinuität über die Revolutionen hinweg und (in seiner 'Wiederkehr'-Klausel) ein Charakteristikum in der Evolution der Eigentumsordnungen. Wie weit diese Geschehensformen auch über den sozial-historischen Bereich hinaus typisch sind, ist jedenfalls weit weniger evident. Eine genügend strenge Prüfung hat, wie uns scheint, bislang noch nicht stattgefunden – schon bei Engels nicht, der die Gesetze zuerst konzipiert hat.

Engels hat über die Genealogie seiner drei Grundgesetze eine recht klare Rechenschaft gegeben, insbesondere auch darüber, unter welchen Auspizien er an das Problem ihrer universellen Gültigkeit (namentlich ihrer Gültigkeit für die außermenschlichen Bereiche) heranging: "Es handelte sich ... darum", so schrieb er über seine naturwissenschaftlichen Studien, "mich auch im einzelnen zu überzeugen – woran im allgemeinen kein Zweifel für mich war –, daß in der Natur dieselben dialektischen Bewegungsgesetze ... sich durchsetzen, die auch in der Geschichte die scheinbare Zufälligkeit der Ereignisse beherrschen; dieselben Gesetze..., die zuerst von Hegel in umfassender Weise, aber in mystifizierter Form

entwickelt worden, und die ... in ihrer ganzen Einfachheit und Allgemeingültigkeit klar zur Bewußtheit zu bringen, eine unsrer Bestrebungen war."[16] Sowjetische Interpreten versichern, mit vollem Recht sei die Entwicklung der menschlichen Gesellschaft das 'Hauptlaboratorium' der Dialektik, weil sich hier die allgemeinen Züge und Prinzipien jeglicher Entwicklung mit besonderer Anschaulichkeit offenbaren.[17]

Die Ergebnisse zeigen jedoch, wie uns scheint, daß man eben doch nicht das Allgemeine im Spezifischen erfaßt, sondern allzu bereitwillig und auf einige vage Analogien hin soundsoviel Spezifisches unbesehen für etwas Universelles genommen hat. Eine bloße Vergewisserung dessen, wovon man zuvor schon überzeugt war, ist hier wohl nicht das geeignete Verfahren gewesen; es bedarf schon einer strengen Prüfung, besonders die Natur ist aufs neue zum Zweck einer 'Probe auf die Dialektik' zu konsultieren. In den neueren sowjetischen Spezialuntersuchungen liegt bereits viel Material für eine kritische Überprüfung der dialektischen Grundgesetze bereit. Man hat, wie schon angedeutet, die traditionellen Formeln mit so vielen Spezifikationen versehen, daß man Mühe hat, das Generelle in ihnen zu nominieren. Die Aufgabe besteht jetzt darin, die Frage nach dem wirklich und uneingeschränkt Universellen mit größter methodischer Strenge neu aufzunehmen.

Was bisher die Frage nach der Allgemeingültigkeit der dialektischen Formeln so sehr verunklärt hat, ist die nachlässige Auslegung, die viele sowjetische Philosophen dem Begriff der Allgemeingültigkeit (*vseobščnost'*) selbst gaben. "Manchmal beweist man die Allgemeingültigkeit von Gesetzen der Dialektik damit", bemerkt M. N. Rutkevič, "daß man Beispiele ihres Wirkens in der Natur, in der Gesellschaft und im Denken anführt. Doch eine solche Beweismethode kann man nicht als überzeugend anerkennen. ... Die Allgemeingültigkeit eines Gesetzes muß damit bewiesen werden, daß es keine Erscheinungen gibt, in denen das betreffende Gesetz nicht wirksam wäre..."[18] Das Verfahren der Demonstration durch Beispiele ist in den letzten Jahren ein wenig in Verruf gekommen, doch ganz ausgespielt hat es noch nicht.

Ernsthaften und direkten Anfechtungen unterliegt bis jetzt nur das dritte der dialektischen Grundgesetze, das der Negation der Negation. Man hat seine Rehabilitierung nach Stalins Tod als Anzeichen der philosophischen 'Entstalinisierung' gewertet, doch damit ist keineswegs gesagt, daß die heutigen Gegner der Universalität dieses Gesetzes allesamt philo-

sophische Reaktionäre oder gar Stalinisten sein müßten. Einer der namhaftesten unter ihnen, M. N. Rutkevič, ist es ganz gewiß nicht, seine Kritik ist unseres Erachtens vernünftig und progressiv. – Doch auf eine genauere Erörterung dieses Themas – eines der meistumstrittenen der neueren sowjetischen Philosophie – müssen wir hier verzichten.

Die Dialektik ist zwar nicht nur Methode, sie will aber auch Methode sein, und zwar universelle Methode, die allen spezifischen Methoden der Einzelwissenschaften zugrunde liegen und sie durchdringen soll. Die sowjetischen Philosophen haben in jüngster Zeit beachtliche Anstrengungen gemacht, um die Lehre von den methodologisch-gnoseologischen Funktionen der Dialektik, die sogenannte dialektische Logik, aus dem Status eines Diskussionsobjekts und eines Projekts in die literarische Realität zu überführen.[19] Die Ergebnisse dieser Bemühungen verdienen eine gesonderte Würdigung, wir wollen hier nur einen Punkt berühren. Dialektik als Methode kann nur den Sinn haben, daß das in den dialektischen Gesetzen verkörperte Wissen um das Allgemeine aller Objektstrukturen beim Herangehen an noch unbekannte Einzelobjekte als eine Art 'Vorwissen' fungiert, das die Schritte der speziellen Erforschung zu orientieren vermag. Die Tauglichkeit der Dialektik als Methodologie und als Logik hängt ganz davon ab, wie weit in ihren Gesetzen wirklich universelle Strukturen des Seienden erfaßt und schematisiert sind. "Diese Gesetze treten", schreibt M. M. Rozental', "eben kraft ihrer Universalität *(vseobščnost')*, d.h. darum, weil sie überall, in jeder beliebigen Sphäre der Welt wirken, in der Eigenschaft von logischen Gesetzen des Denkens, von Gesetzen der Erkenntnis auf."[20] Wenn solchen Gesetzesformeln aber die wirkliche Universalität fehlt, dann können sie auch keine methodische Funktion ausüben, weder als heuristische Direktiven noch als Schemata des Schließens und Beweisens. Sie dienen dann lediglich, wie ein anderer sowjetischer Autor, N. B. Bikkenin, es treffend bezeichnet hat, zur 'illustrativen Verallgemeinerung', die auf ein 'nachträgliches Aufkleben philosophischer Etiketts auf die Produktion der konkreten Wissenschaften' hinausläuft.[21]

DIE POLITISCHE BEDEUTUNG DER DIALEKTIK

Alexander Herzen hat die Dialektik – er hatte noch die Hegelsche vor Augen – als die 'Algebra der Revolution' tituliert; Karl Marx empfand

seine eigene Dialektik erst recht als 'kritisch und revolutionär' und die zeitgenössische marxistisch-leninistische Philosophie setzt diese Tradition fort, indem sie die Erörterungen über die Kategorien und Gesetze der Dialektik stets in praktisch-politische Konsequenzen ausmünden läßt. Man tut das heute nicht mehr so geradlinig und grobschlächtig wie Stalin es tat, doch nach wie vor besteht die Meinung, daß in den von der Dialektik fixierten universellen Ablaufsprinzipien der Entwicklungsprozesse bereits Wesentliches über die Maximen der praktischen Politik, und zwar einer revolutionären Politik, beschlossen liegt.

Die kritische Frage wird hier lauten, ob universelle Seinsgesetze, wenn sie richtig konzipiert sind und wirklich das uneingeschränkt Allgemeine jeglichen Seienden erfassen, dennoch auch konkret genug sein können, um bei so konkreten Entscheidungen in einem speziellen Bereich des Seienden eindeutig eine bestimmte und keine andere Linie des Verhaltens festzulegen. Mancherlei spricht von vornherein gegen eine solche Erwartung; das Allgemeine ist dem Speziellen gegenüber stets offen und disjunktiv, das Spezielle läßt sich aus dem Allgemeinen nicht eindeutig ableiten, wie auch die sowjetischen Philosophen nach den Verirrung des Deduktivismus der Stalinzeit nachdrücklich festgestellt haben. Wirklich entscheiden läßt sich die Frage jedoch nur am konkreten Fall.

Nehmen wir den Optimismus der marxistischen Geschichtsphilosophie und fragen nach seiner allgemein-ontologischen Begründung: wir werden sogleich finden, daß die These vom progressiven Charakter der gesellschaftlichen Entwicklung nicht aus universellen Obersätzen folgt; daß sie zu Recht besteht, muß man in einer Betrachtung der Gesellschaft selbst aufweisen. In der Sphäre des Allgemeinen findet man nur solche teils vagen, teils disjunktiven Sätze: alles Reale ist veränderlich; Veränderungen können kontingent und unsystematisch, sie können auch gerichtet sein; gerichtete Veränderungen können ein Aufstieg von niederen zu höheren Organisationsstufen, ein Abstieg von höheren zu niederen sein und sie können auch auf gleicher Stufe verlaufen; Aufstiegsbewegungen kommen stets nur als begrenzte Prozesse vor, die entweder in ihrer eigenen Konsequenz oder durch Interferenz mit anderen Veränderungsreihen wieder in eine rückläufige Bewegung einmünden. – Daß entscheidende qualitative Veränderungen nicht bloß in Form eines durch quantitative Veränderungen vorbereiteten 'plötzlichen Sprunges' möglich sind, wie es Stalin gelehrt hatte, braucht man heutzutage nicht mehr zu

demonstrieren; die sowjetische Philosophie hat diesen Irrtum selbst richtiggestellt. Doch die Lehre von den 'Widersprüchen' und vom 'Kampf der Gegensätze' scheint noch immer eine unentbehrliche kosmisch-universelle Sanktion des Klassenkampfes zu sein. Doch ist eine solche Sanktion möglich – und bedarf es ihrer überhaupt? Er ist ein soziales Phänomen, dessen Berechtigung und Notwendigkeit ganz ausschließlich aus soziologisch-politischen Erwägungen evident werden muß. Für das im Klassenkampf enthaltene Generelle – die Koordination und Interaktion von Elementen mit entgegengesetzten Richtungsimpulsen – wird es nicht eine, sondern mehrere disjunktive Typen von Resultanten geben. Für ein absolutes Gesetz von der 'Unüberwindlichkeit des Neuen', sich Entwickelnden, wird man ebenfalls keine ontologische Legitimation in der Sphäre des Allgemeinen finden. Es sind also nur recht vage Direktiven, die sich in fundamentalontologischer Überlegung für die praktische Politik gewinnen lassen. Man kann mit ihr nur Triviales beweisen und Absurdes widerlegen (etwa: alles Reale ist veränderlich; wer es für unveränderlich hält, ist im Irrtum).

Wir ziehen aus solchen und ähnlichen Betrachtungen den Schluß, daß eine 'Algebra der Revolution' in Gestalt einer universell-ontologischen Typologie der Veränderung und Entwicklung nicht möglich ist. Möglich und legitim ist nur eine historisch-soziologisch-politische Theorie von den Bedingungen und typischen Verlaufsformen gesellschaftlicher Wandlungsprozesse, unter denen auch die sozialen Revolutionen ihren Ort haben. Die universelle ontologische Theorie vermag den Aufstellungen der soziologischen Revolutionstheorie nichts an Evidenz hinzuzufügen (auch die sowjetische Diamat-Philosophie hat das im Grunde niemals vermocht). Konkrete politische Direktiven lassen sich nur dann aus einer universell-ontologischen Theorie ableiten, wenn man sie zuvor auf methodisch illegitime Weise aus ihrer Konkretheit und Spezifik in den Status einer Pseudo-Universalität erhoben hat.

Philosophen, die Ontologie treiben, mögen in gesellschaftlich-politischen Dingen ihre Überzeugungen und Maximen haben, sie sollten es jedoch unterlassen, diesen Überzeugungen und Maximen eine vermeintlich höhere Dignität und Evidenz verleihen zu wollen, indem sie ihnen einen Platz unter den obersten Prinzipien des Seienden anweisen. So etwas hat sich in der Geschichte der Metaphysik und Ontologie viele Male zugetragen – Optimismus und Pessimismus, Individualismus und Kollektivis-

mus, Aristokratie und Demokratie, Hierarchie und Gleichberechtigung, Konservativismus und Neuerertum, Kampf und Harmonie, für sie alle hat man bereits nach einer Verankerung in den letzten Fundamenten des Seins gesucht. Offenbar geht von der Sphäre menschlich-sozialen Erlebens und Wertens eine starke Suggestion auch auf die fundamentalphilosophische Begriffsbildung aus; manche Denkertypen und ihr Publikum scheinen eine besondere intellektuelle Genugtuung und Selbstbestätigung zu finden, wenn sich ihnen die Prinzipien und Maximen ihres praktischen Daseins, Tuns, Wollens und Hoffens als universelle Ordnungsprinzipien des Seienden überhaupt zu erkennen geben. Doch eine auf Wissenschaftlichkeit bedachte ontologische Kategorien- und Prinzipienlehre wird diesen Suggestionen, die sie in das Geleise des Anthropomorphismus und Anthropozentrismus abzudrängen drohen, mit rigoroser 'Kritik und Selbstkritik' begegnen müssen.

Nun sind nicht nur die sowjetischen Philosophen von der praktisch-politischen Relevanz und Verbindlichkeit ihrer Dialektik als 'Algebra der Revolution' überzeugt; auch einige ihrer Kritiker sehen, wenn auch in ganz anderer Weise, die Dialektik als den gedanklichen Grund für eine Reihe praktisch-gesellschaftlicher Konsequenzen an. So sehen J. M. Bocheński und G. A. Wetter in ihr die philosophische Grundlegung eines extremen Kollektivismus, der das Individuum seiner Eigenständigkeit und seines Eigenwertes, seiner Personwürde, beraubt und den Einzelmenschen nur als untergeordnetes Moment der Gesellschaft, als vorübergehendes Moment des historischen Prozesses gelten läßt. Abgesehen davon, daß hier auch noch spezielle Interpretationsfragen zu klären sind, läßt sich gegen eine solche Kritik im Prinzip dasselbe einwenden wie gegen die Inanspruchnahme der Dialektik für die Begründung einer revolutionären Politik: die allgemeinen Obersätze der Dialektik als eines thematischen Aspekts der ontologischen Ordnungslehre sind (hier wahrscheinlich auch in ihrer heutigen sowjetischen Formulierung) zu unbestimmt, offen und disjunktiv, als daß man eine so eindeutige Deduktion in den Bereich des Sozialen hinein vornehmen könnte. Die Sünden des Ultra-Kollektivismus müssen andere Gründe haben.

IDEOLOGISCHE UND PHILOSOPHISCHE KRITIK DER DIALEKTIK

Wenn ein westlicher Autor an der materialistischen Dialektik Kritik

übt, steht es für die meisten sowjetischen Philosophen axiomatisch fest, daß der Kritiker im allgemeinen wie im einzelnen von sozial-politischen, in seinen Klasseninteressen (d.h. in denen der Bourgeoisie) begründeten Motiven geleitet ist. Wenn z.B. jemand geltend macht, Widersprüche gebe es nur in der Sphäre des Gedankens, nicht aber im Realen, so tut er es darum, weil ihm – dem Ideologen der Bourgeoisie – der Klassenkampf des Proletariats und die soziale Revolution verhaßt ist.

Wir wollen keineswegs ausschließen, daß solche Motive da und dort im Spiel sein können. Allerdings halten wir es für richtig, derartige soziologische Zuordnungen nicht *a priori,* sondern nur bei genügend intimer Kenntnis des betreffenden Denkers vorzunehmen und das Interesse mehr auf seine Gründe als auf irgendwelche Hintergründe zu konzentrieren. Wir wollen uns mit Bestimmtheit nur über die Motive der eigenen, hier vorgebrachten Kritik äußern. Sie richtete sich (a) gegen eine Reihe begriffstechnischer Mängel in der derzeitigen Durchführung der Dialektik; diese Kritik erfolgt unter der Voraussetzung, daß die bezeichneten Mängel auf dem Boden der Diamat-Philosophie überwindbar sind. Die Kritik richtet sich also nicht gegen den weltanschaulichen Grundtypus jener Philosophie, deren Element die Dialektik ist. Sie richtet sich (b) gegen eine illegitime Verquickung von Fundamentalphilosophie und aktueller Gesellschaftspolitik, nicht jedoch gegen bestimmte gesellschaftspolitische Positionen; es erscheint uns denkbar, daß die dialektischen Grundgesetze als ontologische Aussagen allesamt falsch konzipiert und formuliert, die sozialphilosophischen und politisch-strategischen Lehren des Marxismus-Leninismus jedoch gültig sind. Über die Richtigkeit dieser Lehren hat allein die konkrete soziologische Analyse zu befinden.

Daraus folgt, daß es einen Bereich philosophischer Kontroverse gibt, in dem weder die eigentlich weltanschaulichen noch die politisch-ideologischen Positionen zur Debatte stehen. Es wäre sehr wünschenswert, daß die mit unserer Kritik aufgeworfenen Fragen, die allesamt diesem Bereich angehören (und ebenso auch vieles, was andere Autoren vorgebracht haben), im Geiste einer fachlich-sachlichen Diskussion erörtert werden könnten, ohne daß die sowjetischen Philosophen darin gleich einen Angriff auf ihre revolutionäre Seele und deren Heil erblickten. Sie sollten bedenken, daß ihre Dialektik nicht nur und vielleicht nicht primär darum so viel Kritik herausgefordert hat, weil sie so revolutionär ist, sondern wenigstens auch darum, weil ihre Durchführung in vielem philosophisch

so außerordentlich problematisch ist. (Es ist doch auch bekannt, daß gerade ein ideologischer Gegner für seine Kritik vorzugsweise die schwächsten Stellen aussucht.)

Zum Schluß sei noch auf einen Einwand eingegangen, den man in unserem Lager manchmal zu hören bekommt: ist es überhaupt sinnvoll und statthaft, in der heutigen Ost-West-Auseinandersetzung eine Kritik vorzubringen, die ihrer Intention nach konstruktiv und somit auf eine Verbesserung der Position des Gegners gerichtet ist? – Gesetzt den Fall, es ist dieser Kritik beschieden – was in der Tat ihre Absicht ist – im sowjetischen Lager den Prozeß der philosophischen Erkenntnis zu stimulieren, so meinen wir, daß dies in keiner Weise für irgendjemanden zum Nachteil ausschlägt. Wir sind nämlich überzeugt, daß die Tricks des politischen Machtkampfes für den philosophischen Disput keine Gültigkeit haben und daß die Stärkung einer quer durch alle Lager hindurchgehenden 'Partei der Vernunft' für alle Beteiligten das segensreichste ist.

ANMERKUNGEN

1. P. V. Kopnin: *Dialektika kak logika.* 1961. V.I. Čerkesov: *Dialektika kak logika i teorija poznanija.* 1962.
2. P. V. Kopnin: *Dialektika kak logika.* S. 31.
3. V. P. Tugarinov: *Sootnošenie kategorij dialektičeskogo materializma.* 1956.
4. V. P. Rožin: *Predmet i struktura marksistsko-leninskoj filosofii.* 1958.
5. I. D. Andreev: *Dialektičeskij materializm.* 1960. *Dialektičeskij materializm* (Pod red. A. D. Makarova, A. V. Vostrikova, E. N. Česnokova). 1960.
6. Der Verfasser arbeitet gegenwärtig an einer Darstellung der ontologischen Lehren des dialektischen Materialismus, in der er nach diesem Prinzip zu verfahren beabsichtigt.
7. V. P. Tugarinov: *Sootnošenie kategorij istoričeskogo materializma.* 1958. S. 57.
8. *Osnovy marksistskoj filosofii.* 2. Auflage 1962. S. 208. (Deutsche Ausgabe 1959: S. 278). Das 'Schöne' und 'Häßliche' hat man in der 2. Auflage gestrichen.
9. *Ibidem,* S. 213. (Dt. 283)
10. Hier nur ein Textbeispiel: "...Stabilität und Veränderung treten als dialektische Einheit von Gegensätzen auf. Jeder dieser Gegensätze ist in sich selbst widersprüchlich; seinem Wesen nach behauptet und verneint er zugleich den anderen Gegensatz und behauptet und verneint er damit sich selbst. Auf der Grundlage des in ihnen angelegten inneren Widerspruchs treten diese Gegensätze in Wechselwirkung miteinander und gehen ineinander über. Der Übergang der Gegensätze ineinander (der Stabilität in Veränderlichkeit, der Veränderlichkeit in Stabilität) selbst erzeugt, indem er den Widerspruch ihrer Wechselbeziehung auflöst, ihn zugleich ständig aufs neue wieder." (V. I. Svideršskij in: *Filosofskie voprosy sovremennogo učenija o dviženii v prirode.* 1962. S. 26.)
11. In neueren Texten findet man bereits öfters den Hinweis, daß die 'subjektive

Dialektik' nicht einfach ein Spiegelbild der 'objektiven Dialektik' sei, sondern auch ihre eigenen Strukturen habe. Vgl. M. M. Rozental': *Principy dialektičeskoj logiki.* 1960. S. 117.

12. Hier ihr Wortlaut: "Das Gesetz vom Umschlagen quantitativer Veränderungen in qualitative besagt, daß kleine, anfangs unmerkliche quantitative Veränderungen durch allmähliche Anhäufung auf einer bestimmten Stufe das Maß des Gegenstandes verletzen und grundlegende qualitative Veränderungen hervorrufen, in deren Folge sich die Gegenstände verändern, die alte Qualität verschwindet und eine neue Qualität entsteht." (190, dt. 259) "Die Einheit und der Kampf der Gegensätze ist ein Gesetz, kraft dessen allen Dingen, Erscheinungen und Prozessen innerlich widersprüchliche Seiten und Tendenzen eigen sind, die sich in einem Zustand des Kampfes befinden; der Kampf der Gegensätze gibt den inneren Impuls zur Entwicklung, führt zum Anwachsen der Widersprüche, die sich auf einer gewissen Etappe durch das Verschwinden des Alten und die Entstehung des Neuen lösen." (214, dt. 285) "... das Gesetz der Negation der Negation ist ein Gesetz, durch dessen Wirken der Zusammenhang, die Nachfolge-Kontinuität *(preemstvennost')* zwischen Negiertem und Negierendem bedingt wird, auf Grund deren die dialektische Negation nicht als nackte, leichtfertige Negation auftritt, welche die ganze frühere Entwicklung abtäte, sondern als Bedingung der Entwicklung, die alles Positive der vorausgegangenen Stadien in sich aufnimmt und bewahrt, auf einer höheren Stufe gewisse Züge der Ausgangsstufen wiederholt und im ganzen fortschreitenden, progressiven Charakter besitzt." (250, dt. 322)
13. So die beiden in Anmerkung 5 genannten Werke. Ebenso L. V. Vorob'ev, V. M. Kaganov, A. E. Furman: *Osnovnye kategorii i zakony materialističeskoj dialektiki.* 1962.
14. M. N. Rutkevič: *Dialektičeskij materializm.* 1959.
15. *VF* 1960, 12, 154.
16. Friedrich Engels: *Herrn Eugen Dührings Umwälzung der Wissenschaft* ('Anti-Dühring'). Vorwort zur 2. Auflage 1885. Stuttgart. 1953. S. 11.
17. L. V. Vorob'ev in: *Osnovnye kategorii i zakony materialističeskoj dialektiki.* 1962. S. 311.
18. *FN* 1958, 3, 126. Ähnlich *Dialektičeskij materializm.* S. 418.
19. Außer den schon erwähnten Arbeiten von P. V. Kopnin, M. M. Rozental' und V. I. Čerkesov sind noch zwei Bücher von M. N. Alekseev zu nennen: *Dialektika form myšlenija,* 1959 und *Dialektičeskaja logika. Kratkij očerk,* 1960.
20. M. M. Rozental': *Principy dialektičeskoj logiki.* S. 111.
21. in: *Vestnik Moskovskogo universiteta* 1957, 3. Dt. in: *Philosophie und Gesellschaft* (Herausgegeben von W. Pfoh und H. Schulze). Berlin. 1958. S. 185–186.

SIEGFRIED MÜLLER-MARKUS

ZUM ANSCHAULICHKEITSPROBLEM IN DER QUANTENMECHANIK

1

In lezter Zeit kam die Diskussion um die philosophischen Grundlagen der Quanten- und Quantenfeldtheorie wieder in Gang, wie folgende Zusammenstellung der einschlägigen Aufsätze in den Voprosy Filosofii zeigt:

I. A. Akčurin: 'Filosofskoe značenie osnovnyx idej sovremennyx teorij 'elementarnyx' častic' (Die philosophische Bedeutung der Grundideen der heutigen Theorien der 'Elementar'-Teilchen). *VF* 1961, 1.
Ž. P. Viž'e: 'Nekotorye metodologičeskie voprosy teorii 'elementarnyx' častic' (Einige methodologische Fragen der Theorie der 'Elementar'-Teilchen). *VF* 1961, 3.
M. Ë. Omel'janovskij: 'Problema nagljadnosti v fizike' (Das Anschaulichkeitsproblem in der Physik). *VF* 1961, 11.
I. S. Šapiro: 'O kvantovanii prostranstva i vremeni v teorii 'elementarnyx častic' (Über die Quantelung von Raum und Zeit in der Theorie der 'Elementar'-Teilchen). *VF* 1962, 5.
Ju. V. Sačkov: 'Verojatnost' i ee rol' v razvitii poznanija' (Die Wahrscheinlichkeit und ihre Rolle in der Erkenntnis). *VF* 1962, 5.
S. Sëiti: 'Novye predstavlenija ob elementarnyx časticax' (Neue Vorstellungen über die 'Elementar'-Teilchen). *VF* 1962, 6.
A. R. Pozner: 'Filosofskaja interpretacija kvantovoj fiziki v knige A. Lande' (Die philosophische Deutung der Quantenphysik im Buch von A. Lande). *VF* 1962, 7.
S. Sëiti: 'K voprosu ob istolkovanii kvantovo-mexaničeskoj theorii' (Zum Problem der Deutung der quantenmechanischen Theorie). *VF* 1962, 9.
M. Ë. Omel'janovskij: 'Kvantovaja fizika i problema elementarnosti častic' (Die Quantenphysik und das Problem der Elementarität der Teilchen). *VF* 1962, 9.

Studies in Soviet Thought II, 4 (December 1962) © *D. Reidel, Dordrecht-Holland*

Dabei ist aufschlußreich die methodische Wandlung eines der offiziell führenden sowjetischen Naturphilosophen, Akademie-Mitglied Omel'janovskijs. Er befaßt sich vornehmlich mit Fragen der Quantenmechanik; 1956 veröffentlichte er eine Monographie über "Philosophische Probleme der Quantenmechanik".[1] Auf der Allunionskonferenz über philosophische Probleme der modernen Naturwissenschaft hielt er (nach Mitin) das Eingangsreferat über "V. I. Lenin und die philosophischen Probleme der modernen Physik".[2]

Schon dort zeichnete sich ein neuer Stil seines Philosophierens ab. Während er bis dahin – so auf der Kiever Konferenz über philosophische Probleme der modernen Physik 1954 und in seiner Monographie 1956 – einen ausgesprochen negativen Standpunkt gegenüber der "Kopenhagener Deutung" der Quantenmechanik, ja gegenüber ihren physikalischen Grundlagen selbst, einnahm, änderte er auf der Konferenz 1958 seine Haltung. Er bekannte sich nicht mehr zur Theorie der Gesamtheiten Blochincevs [3], sondern zur Konzeption Foks, wonach sich die Wellenfunktion auf das Einzelobjekt bezieht.[4] Als ihm vorgeworfen wurde, seine Haltung fluktuiere, erwiderte er: "Ich bin der Ansicht, daß ein Gelehrter, wie schon Voltaire sagte, sich ändert, und tut er das nicht, so ist er dumm."[5]

Die gegenwärtige Haltung Omel'janovskijs zur Quantenmechanik ist ein Index für die Bemühungen der Sowjetphilosophie, mit der Physik ins Reine zu kommen. Dabei wird freilich der Diamat auf Wissensgebiete angewandt, von denen seine Begründer nichts ahnten. Andererseits sei nicht von vorherein bestritten, daß überlieferte Denkschematismen, wie z.B. der Diamat, erwägenswerte Arbeitshypothesen zur Deutung neuer Sachverhalte darstellen. Der Diamat teilt mit allen spekulativ gewonnenen Thesen das Anrecht auf die Verwendung als Hypothese. Zugegeben, er wird von den sowjetischen Philosophen dogmatisch benutzt; aber sieht man einmal davon ab, so lohnt es sich, den Prüfhammer physikalischer Sachverhalte und bewährter Theorien auf seine Brauchbarkeit anzuwenden.

2

Besonders aufschlußreich ist in dieser Hinsicht das Anschaulichkeitsproblem. In seinem o.g. Aufsatz [6] geht Omel'janovskij von der Behauptung aus, das Anschaulichkeitsproblem in der Physik werde "nur

auf Grund der Idee der dialektischen Einheit der sinnlichen und logischen Erkenntnis gelöst, wobei die physikalische Wissenschaft selbst das ganze notwendige Material für diese Lösung gibt".[7]

Im folgenden werden Omel'janovskijs Thesen zunächst unkommentiert dargestellt: Die atomaren Objekte ähneln unter den einen Bedingungen der Bewegung von Teilchen, unter den anderen der Ausbreitung von Wellen und sind zugleich grundlegend von beiden verschieden. Die Quantenmechanik gibt ihre Bewegung in exakten Begriffen wieder, diese Bewegung selbst ist aber nicht vorstellbar, ist unanschaulich. Andererseits ist es nur zur Hälfte wahr, daß die atomaren Objekte nur mathematisch beschrieben werden und wir für sie keine entsprechenden Worte und Vorstellungen besitzen. Die Quantenmechanik wird durch makroskopische Geräte verifiziert, sie benutzt also in irgend einer Weise anschauliche Begriffe oder unmittelbar mit ihnen zusammenhängende. Die atomaren Objekte sind ja materielle Realitäten; die Materie ist nicht nur das objektiv Reale, sondern eine auf die menschlichen Sinnesorgane wirkende und damit Empfindungen hervorrufende Realität.[8] Der Mensch wüßte nichts von der atomaren Welt, würde sich diese nicht sozusagen vermittels makroskopischer, vom Menschen wahrgenommener Phänomene, die gesetzmäßig mit den Mikrophänomenen zusammenhängen, bekunden.

Der Begriff "anschaulich" wird nach Omel'janovskij weder durch "gewohnheitsmäßig" (March) [9], noch "unmittelbar wahrnehmbar" (Mandel'štam) [10] oder "auf mechanische Vorgänge zurückführbar" erschöpft. Die Elektrodynamik gilt heute als anschaulich, obwohl sie nicht auf die Mechanik zurückzuführen ist. Ähnlich scheint es bei der Quantenmechanik zu sein, und dennoch halten sie March und Mandel'štam nicht für anschaulich. "Anschaulichkeit" ist nicht mit "Vorstellbarkeit" identisch, sind doch das ultraviolette Licht und die Bewegung mit Lichtgeschwindigkeit unvorstellbar, wohl aber anschaulich in dem Sinn, daß die Begriffe und Theorien der klassischen Physik als Verallgemeinerung der geschichtlichen Erfahrung mit makroskopischen Erscheinungen anschaulich sind. Dies ist nicht die Anschaulichkeit des gesunden Menschenverstandes, sie bedeutet vielmehr, daß z.B. mit der Lichtgeschwindigkeit die Vorstellung von einem festen Körper als Maßstab und einer Uhr zusammenhängt; ähnlich ist es bei den Begriffen "Kraft", "Masse" und "Trägheitsgesetz". "Die klassische Physik nimmt aus der 'Vorstellung' (der lebendigen

Anschauung) das entsprechende Material zur gedanklichen Bearbeitung. So verfährt auf ihre Weise auch die nicht-klassische Physik. Die klassischen Theorien entfernen sich jedoch nicht so weit von der "Vorstellung" wie die nicht-klassischen. Die Aufgabe besteht darin, zu bestimmen, wie die Vorstellungen und abstrakten Begriffe in der klassischen und nicht-klassischen Physik zusammenhängen."[11]

Für die Lösung dieser Aufgabe besitzt entscheidenden philosophischen Wert Lenins Kommentar zu Hegel: Nach Hegel macht sich das formale Denken die Identität zum Gesetze und läßt den widersprechenden Inhalt, den es vor sich hat, in die Sphäre der Vorstellung, in Raum und Zeit herabfallen, worin das Widersprechende ... ohne die gegenseitige Berührung vor das Bewußtsein tritt. Dieses ohne gegenseitige Berührung Vor-das Bewußtsein-Treten ist für Lenin das Wesen der Antidialektik, nur daß Hegels "Eselsohren des Idealismus" ihn Raum und Zeit gegenüber dem Denken zu etwas Niedrigerem machen lasse. "Der Kern liegt darin, daß das Denken die gesamte 'Vorstellung' in ihrer Bewegung *erfassen* soll, und *zu diesem Zwecke* muß das *Denken* dialektisch sein"; die Vorstellung ist der Realität näher und doch wieder nicht, sie kann die Bewegung, z.B. mit 300.000 km/sec nicht in ihrer Ganzheit erfassen, aber das Denken erfaßt sie und spiegelt ebenfalls die Realität.[12]

Omel'janovskij interpretiert Lenins These gewissermaßen positivistisch: Das Denken wächst aus der Vorstellung und spiegelt die Wirklichkeit tiefer als sie; es umfaßt die ganze Vorstellung in ihrer Bewegung und macht sie zu seinem Element; deshalb müssen die mathematischen Abstraktionen und Relationen der physikalischen Theorie mit dem unmittelbar wahrnehmbaren Material des Experiments zusammenhängen. So entsprechen in der Quantenmechanik die Eigenwerte der Operatoren den experimentell beobachtbaren Werten der entsprechenden Größen. Keine physikalische Theorie kann daher den Zusammenhang ihrer mathematischen Begriffe mit den Angaben des Geräts vermeiden, will sie nicht ein leeres mathematisches Schema sein. Die philosophische Begründung liegt darin, daß die Natur bewegte Materie darstellt und ihre Erkenntnis außerhalb ihrer Einwirkung auf die Sinnesorgane unmöglich ist.

Der mathematische Apparat hebt die Wahrnehmungsdaten auf das Niveau der theoretischen Verallgemeinerung und bildet damit die Gesetze der Erscheinungen ab. Der physikalische Begriff ist das Ergebnis eines

zweieinigen sinnlich-anschaulichen und abstrakt-gedanklichen Erkenntnisvorgangs. Der Übergang von den Gerätangaben zu den mathematischen Begriffen und von diesen zu den Gerätangaben vollzieht sich nach bestimmten Regeln und setzt die Existenz von spezifischen Naturgesetzen des jeweiligen Erscheinungsgebiets voraus. Daß nun die Mikrophänomene nicht auf die klassischen Gesetze zurückzuführen sind, muß sich auch im mathematischen Apparat und den genannten Übergangsregeln ausprägen. Logisch unterscheidet sich die physikalische Begriffsbildung in nichts von der alltäglichen: Das Kind vereint einzelne Wahrnehmungen etwa auf Grund des ersten Signalsystems zur Wahrnehmung einer bestimmten Katze. Es erfolgt eine Verallgemeinerung des erworbenen bedingten Reflexes. Aber erst das zweite Signalsystem bewirkt, daß aus Erzählungen über Katzen sich der allgemeine Begriff "Katze" bildet und somit die Einzelkatze zum Vertreter der Art "Katze" wird. In der Einheit der sinnlichen und abstrakten Erkenntnis spiegelt sich die Dialektik der Wirklichkeit wider. Auch in der klassischen Physik stellen die Begriffe unmittelbare Verallgemeinerungen von Begriffen des gesunden Menschenverstandes dar, so der Begriff "Länge" eine Verallgemeinerung wahrnehmbarer Dinge. Daraus entstanden die Begriffe des Maßstabs und der Längeneinheit und daraus wieder die Regeln der Zuordnung von Längen und Zahlen. Es wäre allerdings reine Pedanterie, zu verlangen, dass alle Begriffe der klassischen und nicht-klassischen Physik so entstanden sind. Der mathematische Apparat einer Theorie ist relativ selbständig [13] und hat seine eigene Entwicklungslogik, deshalb treten bestimmte Begriffe unter bestimmten Bedingungen zuerst als mathematische Abstraktionen auf und finden erst später eine physikalische Deutung. Diese Deutung ist eine überaus wichtige Seite der Theorie, ohne welche sie ein mathematisches Schema und keine physikalische Theorie darstellt. Nur sie gibt den mathematischen Abstraktionen physikalisches Fleisch und gestattet, die Naturgesetze zu formulieren.

Während nach Omel'janovskij der erste Weg (von der Wahrnehmung zur Abstraktion) für die klassische Physik typisch ist, ist der umgekehrte Weg typisch für die moderne Physik: Schon im ersten Stadium der quantentheoretischen Hypothesen trat die heuristische Rolle der mathematischen Form in den Vordergrund, wobei ihr physikalischer Sinn unklar blieb. Erst als der mathematische Apparat gefunden war, der die Quantelung der Energie ausdrückte, konnte man den physikalischen Sinn aller

Größen dieses Apparats deuten. So kennzeichnet die Wellenfunktion den Zustand eines Mikroobjekts unter bestimmten makroskopischen Bedingungen. Sie ist es, die den Übergang von den Operatoren zu den beobachtbaren Größen ermöglicht. Ist die Wellenfunktion nicht Eigenfunktion des Operators einer Größe, so hat diese keinen bestimmten, sondern nur einen mittleren Wert. Überhaupt hat in der Quantenmechanik nur ein Teil der Größen, die sich auf ein Mikroobjekt in einem bestimmten Zustand beziehen, einen bestimmten Wert, alle anderen Größen haben nur mittlere Werte.[14] Daß die Wellenfunktion nur mit den Eigenfunktionen bestimmter, nicht aber anderer Operatoren zusammenfällt, kommt in den Vertauschungsrelationen zum Ausdruck; diese stellen den zentralen Punkt der Quantenmechanik dar: Quantenimpuls und Quantenkoordinate können nicht gleichzeitig bestimmte Werte haben. In den Vertauschungsrelationen tritt in Form der mathematischen Abstraktion die Einheit der entgegengesetzten Teilchen-Wellen-Eigenschaften der Mikroobjekte zutage. Dies ist ein großartiges Beispiel der Dialektik der Natur und ihrer Erkenntnis durch den Menschen.

Das Element der Vorstellbarkeit tritt somit nach Omel'janovskij auch in die Quantenbegriffe ein, denn ohne den Zusammenhang mit den im Gerät wahrnehmbaren Eigenwerten gibt es ebensowenig Quantenbegriffe wie klassische Begriffe ohne Zusammenhang zwischen den Variabeln und den Gerätangaben, nur mit dem Unterschied, daß die ersteren eine vermittelte, die letzteren eine unmittelbare Verallgemeinerung der Beobachtungsdaten darstellen. Dabei beziehen sich die Eigenwerte der Quantenoperatoren ebenso auf die Beobachtungsdaten wie die klassischen Variabeln, ein Fleck auf dem Schirm bei der Elektronendiffraktion wird ebenso durch einen Maßstab gemessen wie der Einschlag einer Kugel. Es gibt also keine Messung von Quantengrößen ohne klassische Begriffe. Freilich legt nach Omel'janovskij die zweieinige Natur der Mikroobjekte ihr Siegel auf die in der Quantenmechanik verwandten klassischen Begriffe. Da die Eigenwerte der Impuls- und Koordinaten-Operatoren im selben Zustand unvereinbar sind, ist der klassische Teilchenbegriff in der Quantenmechanik nicht in derselben Form anwendbar wie in der klassischen Theorie. Die Kennzeichnungen als Welle oder Teilchen verlieren in der Quantenmechanik ihre „klassische" Selbständigkeit, sie werden fließend und setzen einander voraus. Die sogenannte Relativität des Zustandes eines Mikroobjekts (der Quantenzustand wird nur im Zusam-

menhang mit den Bedingungen der experimentellen Situation bestimmt) ist eine Äußerung der zweieinigen Wellen- und Teilchennatur des Mikroobjekts. In keinem Experiment verhalten sich Mikroobjekt exakt wie Wellen oder Teilchen der makroskopischen Welt. Da andererseits zu ihrer Beschreibung nur klassische Begriffe verwendbar sind, schließen sich in Experimenten mit Mikroobjekten klassischer Wellen- und Teilchenbegriff aus und die entsprechenden experimentellen Bedingungen sind unvereinbar. Der Widerspruch löst sich durch Einführung neuer Begriffe, die den entsprechenden klassischen Begriffen ähneln, aber grundlegend von ihnen verschieden sind. „Quantenbegriffe sind also anschaulich, nicht jedoch in dem Sinn, daß man ein makroskopisches Modell der Mikroobjekte bilden kann, sondern in jenem weiten Sinne, daß mit bestimmten physikalischen Quantenbegriffen Sinneseindrücke und Wahrnehmungen verknüpft werden, welche die Mikroobjekte durch die Gerätangaben im Menschen hervorrufen. Dementsprechend gehen die klassischen Begriffe notwendig in die Quantenmechanik ein, figurieren dort aber nicht als Grundbegriffe, sondern als Element der sich daraus entwickelnden Quantenbegriffe, ähnlich wie Sauerstoff und Wasserstoff im Wasser nicht im Zustand des Gases 'gegenwärtig' sind, sondern in Form von chemischen Elementen, die eine vom Gas verschiedene flüssige Substanz bilden."[15]

3

Eine Diskussion der These Omel'janovskij setzt eine Klärung des Begriffs "anschaulich" voraus. Implizit wird er bei Omel'janovskij im Sinn von "physikalisch deutbar" benutzt. Dann aber entfällt das von ihm gestellte Problem, denn in diesem Fall wird jede physikalische Theorie anschaulich. Freilich liegt noch kein Kriterium vor, ob alle in der Theorie vorkommenden Ausdrücke deutbar sein müssen; im Grenzfall würde u.u genügen, daß nur ein Ausdruck deutbar ist, so z.B. das Zeichen "h" in der Quantenmechanik. Omel'janovskijs Definition ist also zu weit.
Mit Recht werden von ihm Definitionen wie "gewohnheitsmäßig", "unmittelbar wahrnehmbar" oder "vorstellbar" abgelehnt. So operiert der mathematische Physiker "gewohnheitsmäßig" mit dem Krümmungstensor R_{iklm}, ob er damit anschaulich wird, ist aber noch offen. Soll andererseits nur das unmittelbar Wahrnehmbare anschaulich sein, dann wird

die nicht physikalisch gedeutete Geometrie, sofern sie nur mit Idealgegenständen operiert, unanschaulich. Ist "anschaulich" aber gleich "vorstellbar", so wird anschaulich auch die Vorfreude über ein gelingendes Werk.

Um ein brauchbares Kriterium zu finden, sei von der nächstliegenden Definition ausgegangen. Als "anschaulich" im Sinne der Definition A_1 wird definiert "aufgespannt im Wahrnehmungsfeld des leiblichen Auges". Anschaulich ist dann die Umlaufbewegung der Gondel eines Karussells, der davon gedrehte Film, die Zeichnung des Grundrißes des Karussells und die Zeichenkombination "Karussell". Als Unterklassen von A_1 definieren wir

A_{11}: Anschaulich sind natürliche Gegenstände* im Wahrnehmungsfeld des Auges.

A_{12}: Anschaulich sind künstliche Gegenstände im Wahrnehmungsfeld des Auges.

Unanschaulich sind nach diesen Definitionen natürliche Gegenstände, die nicht unter A_{11} fallen, aber Deutungen von Elementen der Unterklasse A_{12} darstellen, wie der Bahndrehimpuls. Dennoch wird der Physiker auch den Begriff "Bahndrehimpuls" für anschaulich halten, weil (1) sein leibliches Auge die Drehbewegung eines Karussells beobachtet und (2) gewissen dabei gemessenen Werten der Vektor $\mathfrak{m}$ in einem nach A_{12} anschaulichen Koordinatensystem zugeordnet werden kann.

Wir definieren daher:

A_2: Anschaulich zu machen sind natürliche oder künstliche Gegenstände, die anschaulichen Gegenständen umkehrbar eindeutig zuzuordnen sind, auch wenn sie im Sinne von A_{11} und A_{12} unanschaulich sind.

Aus den damit definierten Klassen von Gegenständen sondern wir die Unterklasse A_{21} aus nach

A_{21}: Physikalisch anschaulich sind Elemente einer physikalischen Theorie die anschaulichen Gegenständen umkehrbar eindeutig zuzuordnen sind oder selbst anschaulich im Sinne von A_{11} sind.

Die Klasse der durch A_{21} definierten Gegenstände ist also *a priori* größer als die Klasse der durch A_{11} definierten.

Die Unterklasse A_{21} zerfällt ihrerseits in folgende Unterklassen: A_{211}

* Unter "Gegenstand" sei hier in einem allgemeinen Sinn "Forschungsobjekt" verstanden.

umfaßt jene Gegenstände der Unterklasse A_{21}, die unmittelbar anschaulichen Gegenständen zuzuordnen sind; so ist die Umlaufbahn einer Karussell-Gondel unmittelbar auf einen Film abzubilden. A_{212} umfaßt jene Gegenstände von A_{21}, die nur mit Hilfe einer mathematischen Operation anschaulichen Gegenständen zuzuordnen sind. So ist die Gesamtheit der Protokollaussagen über das Verhalten der Gondel, aus denen der Begriff "Drehimpuls" gebildet wird, nur durch das Vektorprodukt

$$\mathfrak{m} = \mathfrak{r} \times \mathfrak{p}$$

einem Vektor in einem Koordinatensystem zuzuordnen. Dies meint Omel'janovskij offenbar unter "vermittelter Verallgemeinerung"; ob hier jedoch eine echte Verallgemeinerung, also Abstraktion, vorliegt, bezweifeln wir; es soll aber hier undiskutiert bleiben.[16]

Es bleibt nun die Frage zu klären, ob eine physikalische Theorie als anschaulich gilt, auch wenn nur eine Unterklasse der dort benutzten Ausdrücke die Definition A_{21} erfüllt. Die Antwort kann nur durch Konvention gegeben werden. Unser Vorschlag ist, eine physikalische Theorie als unanschaulich zu bezeichnen, wenn die für sie typischen Grundbegriffe nicht unter A_{21} fallen. Was seinerseits "typischer Grundbegriff" ist, kann nur aus dem consensus der Mehrheit der Physiker wiederum nach Konvention entschieden werden, ähnlich wie es völkerrechtliche Regeln gibt, die ihre Herkunft aus der Gewohnheit oder der Meinung führender Gelehrter ableiten.

Wir schlagen vor, die Operatoren der Quantenmechanik als für diese Theorie typisch und grundlegend zu bezeichnen. Es scheint, daß auch Omel'janovskij dieser Auffassung ist. Die Grundrelation der Quantentheorie

$$\hat{L}\hat{M} \neq \hat{M}\hat{L}$$

ist ja eine Folge des Operatorcharakters von $\hat{L}$ und $\hat{M}$. Omel'janovskijs These ist, daß die Eigenwerte der Operatoren Beobachtungsdaten zuzuordnen sind und daher ein Element der Vorstellbarkeit in die Quantenbegriffe eintritt. Tatsächlich sind etwa den Eigenwerten $m_z = hm (m = 0, \pm 1, \ldots \pm l)$ der z-Komponente des Bahndrehimpulses eines Elektrons in der Elektronenhülle Beobachtungsdaten zuzuordnen. Es gibt jedoch Klassen von Eigenwerten, deren gleichzeitige Beobachtung ausgeschlossen ist, so etwa sind m_z und m_y nicht exakt beobachtbar, wenn m^2 und m_x bestimmte Werte annehmen. Nun verlangt aber der Begriff "Umlaufbahn"

die gleichzeitige Angabe der drei Komponenten m_x, m_y, m_z des Drehimpulses, d.h. ihre Darstellung in einem drei-achsigen Koordinatensystem. Wir haben also keine Möglichkeit, unter Zuhilfenahme einer umkehrbar eindeutigen Zuordnung von Protokollaussagen zu Zahlwerten für m_x, m_y, m_z etwas wie die Umlaufbahn eines Elektrons im Sinne von A_{211} anschaulich zu machen.

Die Quantenmechanik ist also höchstens partiell anschaulich, wobei "partiell" den Sachverhalt ausdrückt, daß von je zwei komplementären Größen immer nur die eine anschaulich gemacht werden kann.

Sind nun die Operatoren der Quantenmechanik anschaulich im Sinne von A_{211}? Dafür scheint zu sprechen, daß etwa der Ausdruck für den Drehimpuls-Operator $\hat{\mathfrak{m}} = \mathfrak{r} \times \mathfrak{p}$ eine äußere Analogie zum klassischen Ausdruck $\mathfrak{m} = \mathfrak{r} \times \mathfrak{p}$ besitzt. Auch ist die von $\hat{\mathfrak{m}}$ dargestellte Größe ebenso wie die klassische Größe m ein Integral der Bewegungsgleichungen in einem Feld von Zentralkräften. Genügt diese Analogie aber, um $\hat{\mathfrak{m}}$ "anschaulich" zu nennen? Im Sinne von A_{211} offenbar nicht, da keine unmittelbare Zuordnung zwischen einer Protokollaussage und der mathematischen Operation

$$\hat{\mathfrak{m}}^2 = -h^2 \nabla^2_{v,\varphi}$$

besteht. Das Zeichen $\hat{\mathfrak{m}}^2$ bedeutet eine mathematische Operation, durchführbar vom menschlichen Geist an einer noch zu bezeichnenden Funktion.

Sie besitzt in den Protokollaussagen kein Gegenstück, das ihr zuzuordnen wäre; erst die Eigenwerte des Operators sind beobachtbar. Damit entfällt nach abigem auch A_{212}.

Es gibt also eine Klasse von typischen Grundbegriffen der Quantenmechanik, die unanschaulich sind. Sie stellen nicht, wie Omel'janovskij meint, Abstraktionen dar, da es kein Erfahrungsmaterial gibt, aus denen sie abstrahiert wären. Sie werden durch rein mathematische Verfahren gewonnen, sind also Idealgebilde. Daß ihre Verwendung dennoch zu beobachtbaren Größen, den Eigenwerten, führt, zählt zum Geheimnis der Begreifbarkeit der Welt.

ANMERKUNGEN

1. Omel'janovskij, M. E.: *Filosofskie voprosy kvantovoj mechaniki.* Moskau. 1956.
2. Omel'janovskij, M. E.: 'V. I. Lenin i filosofskie voprosy sovremennoj fiziki', in *Filosofskie problemy sovremennogo estestvoznanja.* Moskau. 1959. 32–92.
3. Nach Blochincev beziehen sich alle Wahrscheinlichkeiten und alle aus der Wellenfunktion errechenbaren Mittelwerte auf Messungen innerhalb von Gesamtheiten. Eine reine Gesamtheit ist eine Menge von Teilchen oder Systemen, die sich unabhängig voneinander im gleichen Zustand befinden und daher zur Wiederholung einer großen Zahl identischer Versuche führen können. Der Zustand eines durch die Wellenfunktion gekennzeichneten Teilchens oder Systems ist als dessen Zugehörigkeit zu einer reinen Gesamtheit aufzufassen. Die Wellenfunktion ist eine objektive Kennzeichnung einer quantenmechanischen Gesamtheit. Blochincev, D. J.: *Osnovy kvantovoj mechaniki,* Moskau–Leningrad, 1949, zitiert nach der deutschen Übersetzung *Grundlagen der Quantenmechanik,* Berlin 1953, pp. 38–42. Dieselbe Auffassung, nur mit zusätzlichen Erläuterungen, vertritt Blochincev in der dritten russischen Auflage, Moskau, 1961, 51–55, obwohl ihm inzwischen von Fok verschiedentlich widersprochen wurde.
4. Siehe V. A. Fok: 'Ob interpretacii kvantovoj mechaniki'. In *Filosofskie problemy,* 212–236, und 555–557. Zur Diskussion zwischen Fok und Blochincev siehe V. A. Fok: 'O tak nazyvaemyx ansambljax v kvantovoj mexanike'. *VF,* 1952, 4, 170–174. Omel'janovskij unterstützte in seinen Filosofskie voprosy kvantovoj mexaniki entschieden den Standpunkt Blochincevs, weil die foksche Konzeption ihm das Prinzip der Realität der Quantenzustände und des Determinismus in der Quantenmechanik zu verletzen schien. *Filosofskie voprosy,* 87–102.
5. *Filosofskie problemy,* 561.
6. Omel'janovskij M. E.: 'Problema nagljadnosti v fizike'. *VF,* 1961, 11, 54–62.
7. Ebenda, 55.
8. Diese Zuordnung zum Menschen ist ein bereits die Leninsche Materiedefinition kennzeichnendes Merkmal. Sie zu begründen, haben freilich die Leninisten nie unternommen: Hätte doch jeder induktive Beweis versagt und vermutlich allein die Hypothese einer durch Gott gesetzten Zuordnung ausgereicht. Omel'janovskijs ganzes Anliegen ist offenbar durch den Nachweis einer solchen Zuordnung motiviert, um sowohl einen Erkenntnisrealismus bereits auf der Stufe der Wahrnehmung als auch die Leninsche Materiedefinition zu retten. Das Problem der Anschaulichkeit in der Quantenmechanik ist aber gerade, ob eine solche Zuordnung von Mikroobjekten zu Makrowesen überhaupt eindeutig möglich ist. Gerade weil wir als Makrowesen nur die uns existenziell zugewiesenen Begriffe makroskopischer Erfahrung benutzen können, trägt diese Zuordnung, wenn sie überhaupt besteht, vermutlich ein grundsätzliches Moment der Unbestimmtheit.
9. March A.: *Die physikalische Erkenntnis und ihre Grenzen.* Braunschweig. 1960. P.12
10. Omel'janovskij verweist auf L. I. Mandel'štam: *Polnoe sobranie trudov,* tom. V, 1950, str. 403–404; das Werk ist dem Verfasser leider nicht zugänglich.
11. VF, 1961, 11; 57.
12. Lenin, W. I.: *Aus dem philosophischen Nachlaß.* Berlin, 1961, pp. 151, 152. Omel'janovskij zitiert nach V. I. Lenin: *Soč.,* t. 38, str. 220–221. Was Lenin hier ausspricht, hat nichts mit Dialektik zu tun: Die gedankliche Erfassung der Lichtgeschwindigkeit geschieht nicht durch eine Synthese aus den Dimensionen "km" und

"sec", sondern durch eine mathematische Operation, den Bruch aus 300.000 km und 1 sec. Man sieht, mit welchen Vorurteilen Lenin die Sowjetphilosophie belastete.

13. Diese These finden wir früher schon bei A. D. Aleksandrov in *Priroda,* 1951, 1, 5–15 und 1951, 7, 3–11.
14. Dies ist ein erhebliches Eingeständnis gegenüber der früheren Haltung Omel'janovskijs, wie er sie noch 1956 in den *Filosofskie voprosy kvantovoj mechaniki* vertrat. Dort erkannte er zwar die mathematische Form der Unbestimmtheitsrelation an, leugnete aber deren physikalischen Inhalt. *Filosofskie voprosy,* 70–87.
15. VF, 1961, 11, 62.
16. Desgleich wird nicht diskutiert, ob es eine nicht-leere Klasse unanschaulicher natürlicher Gegenstände gibt, die unmittelbar anschaulich gemacht werden können, ebenso eine nicht-leere Klasse anschaulicher natürlicher Gegenstände, die nicht anschaulichen Gegenstanden zuzuordnen sind.

DAVID DINSMORE COMEY

MARXIST-LENINIST IDEOLOGY AND SOVIET POLICY

I. INTRODUCTORY REMARKS

In the last few years, the rulers of the Soviet Union have gone out of their way to stress the importance of the official Marxist-Leninist ideology. In doing so, they have not only emphasized that it is a program of action according to which Soviet policy should be guided, but they have also indicated their belief in it as a scientifically correct view of historical reality, particularly of social processes. This renewed emphasis on ideology by the Soviets makes it worth our study, for if they in fact take it as seriously as they claim, then it necessarily becomes an important factor in any of our analyses of Soviet policy.

Yet in spite of their stress on Marxist-Leninist ideology, these same Soviet leaders have often adopted policies which seem to be at variance with the ideology. These leaders have sometimes even revised certain parts of the ideology, once thought to be an unrevisable dogma, in order to make it fit in with particular policies which they wished to adopt.

Not surprisingly, this interplay between ideology and Soviet policy has received a great deal of attention in the West. Many analyses have been published, and a wide variety of interpretations has been given to that portion of the factual data to which we have access in the West. In these analyses, the central questions have been: "Are the frequent references to ideology by the Soviet leaders merely a fraudulent sham, or are they genuine?" "Is Soviet policy dictated largely by ideological considerations or is *Realpolitik* a much more important factor?" This article will not seek to answer these questions directly, but rather to set forth a schema which may prove useful in analysing the rôle of ideology with respect to policy.[1]

II. THE REALPOLITIK AND IDEOLOGY-STRESSING ANALYSES

Rather than discuss the many different analyses of ideology and policy which have appeared in the last few years, we will examine only two

Studies in Soviet Thought II, 4 (December 1962) © *D. Reidel, Dordrecht-Holland*

rather opposite positions, which for purposes of brevity will be referred to as the '*Realpolitik* analysis' and the 'ideology-stressing analysis'.

The *Realpolitik* analysis maintains that studying Marxist-Leninist ideology is of relatively little assistance in understanding Soviet policy.[2] This analysis argues that the basic source of Soviet policy is not ideology but *Realpolitik;* short-range Soviet policies (which, it is argued, are the only policies which can be validly evaluated) are based on the Soviets' estimate of their own national interest. According to this analysis, Soviet foreign policy is really a continuation of Czarist foreign policy; its expansionistic tendencies are the traditional Russian ones, and neither a novel phenomenon nor a Marxist-Leninist one. Such an analysis has a more difficult time explaining Soviet domestic policy in non-Marxist-Leninist terms, but the general approach seems to be that Soviet domestic policy is typical of any totalitarian state which seeks to convert itself from a backward, primarily agricultural economy into a heavily industrialized, militarily powerful nation.

The ideology-stressing analysis takes a rather different position, maintaining that Marxist-Leninist ideology offers the key to the explanation of Soviet policy, both foreign and domestic.[3] It is argued that there have been many cases where Soviet policy actually ran counter to national interests (if viewed realistically) and can be explained only in terms of an orthodox ideological position. This analysis holds that Marxist-Leninist ideology, even its more abstract philosophical components, is constantly being applied by the Soviet leadership to help them determine policy. Soviet policy is thus said to be far less pragmatic than ideological, and *Realpolitik* is said to play a rôle only in certain short-range situations and none at all in the over-all long range policy of the Soviet Union. This analysis also notes that Soviet leaders have been educated and promoted largely on the basis of their ideological dedication; some of the older generation have even suffered considerable personal hardship because of their ideological commitment. Therefore, it is argued, it would be unlikely that they would create their policies in an ideological vacuum and only pay lip service to the ideology when it furthered their own ends.

Many confirming examples for each of the *Realpolitik* and ideology-stressing analyses can be found, but before discussing the merits of these arguments, we will try to clarify just what the Marxist-Leninist ideology includes.

III. PHILOSOPHY, DOCTRINE AND ACTION-PROGRAMME

'Ideology' is a word which is frequently used but rather seldom defined. Many people have used it to cover a rather broad spectrum of statements ranging from those of pure logic to those of temporary political strategy. The result of this blanket usage has often been to confuse certain features of ideology which ought to be distinguished conceptually.

Zbigniew Brzezinski has formulated what is probably the best working definition of ideology:

"Modern revolutionary ideology is essentially an action program derived from certain doctrinal assumptions about the nature of reality and expressed through certain stated, not overly complex, assertions about the inadequacy of the past or present state of societal affairs. These assertions include an explicit guide to action outlining methods for changing the situation, with some general, idealized notions about the eventual state of affairs."[4]

Brzezinski also makes a distiction between two portions of the ideology which he calls the *doctrine* and the *action-program:*

"Basically, the doctrine involves the philosophical assumptions, the broad historical laws, the ultimate ends – in brief the *a priori* assertions which form the foundation stone of the ideology. The doctrine remains basically unchanging. The action-program, derived from the doctrinal principles, involves the purposeful process of fulfillment of that which is held to be immanent. It can change if need be, and the success of the change in itself establishes a new contingent truth. ...Without the doctrine, ideology would be equivalent to mere pragmatism; relying on doctrine alone, ideology would be just a static dogma."[5]

This is a very useful distinction, but it still does not sufficiently clarify the rôle of the philosophical assumptions. These philosophical assumptions are not really an inherent part of the ideology, and yet they play an important enough rôle together with the ideology that they cannot be omitted from our analysis. Therefore we shall add the *philosophy* as a third component in addition to the ideological doctrine and action-program, even though the philosophy is logically separate from the ideology, and does not, at least in a conceptual sense, if not an historical sense, presuppose a developed ideology.

What we will hereafter refer to as 'Marxist-Leninist philosophy' consists

of a number of assumptions drawn from dialectical logic, ontology, and theory of knowledge. It includes what the Soviets call 'dialectical materialism' (Diamat), and certain philosophical parts of 'historical materialism' (Histomat) as well. Some of the more important of these philosophical assumptions are the following: the law of the negation of the negation, the law of the transformation of quantity into quality, and the law of the unity and conflict of opposites; the principles of matter as the sole objective reality, the 'infinity in depth' of matter, the existence of matter independent of human consciousness, and the 'reflection' theory of knowledge. [6]

The ideological *doctrine* consists of certain broad pronouncements about historical laws, social processes, and the ultimate goals of the Communist movement. These correspond in large part to Histomat, and include such principles as the inevitable downfall of capitalism, the leadership and authority of the Communist party, the dictatorship of the proletariat, and the eventual withering away of the state.

The *action-program* is partially derived from the doctrinal principles, but is far more amenable to change and reflects contemporary problems of applying the unchanging doctrine to the changing realities of the time. Examples of principles within the action-program would be such questions as socialism in one country, many versus one road to socialism, and peaceful coexistence with non-Communist nations.

It should be made clear that these three components sometimes overlap and are not necessarily sharply divided from one another; in concrete cases it may be difficult to decide whether a particular principle or dogma belongs to one component or another or to both. Again, the border-line between the ideology and Party policies is often fuzzy; in the Party's recent program (published July 30, 1961) there are certain statements, such as those about preconditions for the achievement of a Communist society, which can be considered as being in the border-area between the assumptions of the action-program and the planned policies to be carried out in the next two decades.

IV. LOGICAL RELATIONSHIPS BETWEEN IDEOLOGY AND POLICY

Having distinguished these three components, we will now examine the various relationships which they have with each other. In this section,

we will inquire into the *logical* relationships between these components, beginning first with the doctrine and the action-program, we will explore their connexions with each other and with actual policies, and then take up the connexions between philosophy and the two other components in section V.

The problem of the logical connexions between ideology and policy is of particular importance in assessing certain claims of the ideology-stressing analysts. In order to show that a given policy of the Soviet government has supposedly been derived from Marxist-Leninist doctrine, one must show at least that a policy directly opposed to the adopted policy could not also have been derived. This is, in a sense, a minimum requirement of any ideology-stressing analysis which talks of 'deriving' policy from the ideology. If *any* policy adopted by the Soviets can be derived from Marxist-Leninist ideology, then the whole *raison d'être* of the ideology-stressing analysis disappears, and it becomes an uninteresting system of tautologies. If Marxist-Leninist ideology really is a 'scientific' program of action, then it necessarily tends toward implementation of certain types of policies and cannot consistently seek to apply certain others. Just as a scientific prediction, given the two alternatives of "It will rain in ten minutes" or "It will not rain in ten minutes", must rule out one or the other of these alternatives if it is to be a genuine prediction, likewise an ideology, in order to be a genuine program guiding action, must rule out certain alternatives. If Marxism-Leninism can equally well justify collectivization *and* increasing the private sector of agriculture, then it is no longer the consistent guide to action which some people claim it is.

There is a particular form of this problem which is well known to logicians, and is the reason for their great concern over the consistency of the formal logical systems with which they work: if a system of statements contains simultaneous assertions of contradictory statements, such as the conjunction of both the statement *P* and the statement *not-P,* then any statement *Q* whatsoever follows as a logical consequence – even the statement that the logician is God. In order to avoid such embarrassing consequences, logicians tend to worry a good deal about avoiding contradictions in their logical systems.

Possibly a similar concern should be shown by those who stress the importance of ideology in determining policy: if one treats the ideology

as a sort of axiomatic system from which policies are then derived, there cannot within the ideology be any two statements which logically contradict each other; otherwise any statement Q would be derivable, and hence any policy could be said to be a consequence of the ideology. This is perhaps the quickest and most vacuous way of achieving the truth of the generalization that "All policies are derived from the ideology", but it is doubtful that either the Marxist-Leninists or the ideology-stressing analysts want to resort to such a specious argument.

A more plausible argument would be to maintain that instead of treating the entire ideology as a unified set of statements, we should distinguish certain subsets of statements within the ideology as relatively independent units. A given policy might be derived from a particular subset α of the doctrine, and *within* this subset α there might be no logically inconsistent statements. Thus the problem of any policy following from contradictory statements occurring in the ideology *taken as a whole* would not apply in this case.[7]

This is perhaps a more viable schema, and may help to explain some of the conflicts which seem to arise between certain Soviet policies. Suppose that there are two different ideological subsets α and β, each of which is internally consistent (i.e., contains no contradictory statements) when taken by itself; then suppose that certain statements in α contradict other statements in β; if someone derives one policy X from subset α, and then another policy Y from subset β, each of his derivations may be logically sound, but because of the contradiction of certain assumptions in α and β when taken together, the two derived policies X and Y may end up in conflict. Thus it is possible, given the best of intentions to remain logically consistent, to end up with conflicting policies. It could be argued that this is the decision procedure which Soviet leaders follow: they take certain limited subsets of the ideology as being relevant to a given policy decision, and decide accordingly, without realizing that because of contradictions between assumptions some of these subsets, the resulting policies will conflict with one another.

The question may be raised as to whether or not it makes sense to apply the laws of logic to the sphere of politico-sociological phenomena. Such an application is admittedly difficult, for logical laws strictly apply to discrete entities, and our non-mathematical descriptions of politico-sociological phenomena have not yet reached the level of sophistication

where they are discrete and distinct enough to admit determinative application of formal logic to them.

In order to meaningfully state that "Statement Q contradicts statements Y and Z", or "Statement Q is derivable from Y and Z", both Y and Z, as well as Q, must be formulated so that they have a certain *determinacy:* they must be free of ambiguity and must be expressed with a certain degree of clarity and precision. If the statements Q, Y and Z are all so vague or vacuously formulated that their relative truth-values cannot be established, then one cannot say definitely either that they are contradictory or consistent. Rather, one has to say that under the circumstances there is no basis available for making any such logical comparison between them.

This general difficulty of applying logical reasoning to the statements and descriptions of political and social phenomena at their present level of descriptive ability becomes doubly compounded when one is dealing with statements and assumptions which are deliberately stated vaguely. Any revolutionary doctrine hopes to appeal to as many people as possible, and Marxism-Leninism in particular has reached a high level of systematic ambiguity. By deliberately couching their assumptions and predictions vaguely and ambiguously so as to broaden their appeal, the Marxist-Leninists have made it unusually difficult to determine the logical relationships between these statements.

The *indeterminacy* of many of the statements of the ideology make any attempt at a logical decision procedure (for deciding, say, whether a given policy is in accord with the ideology or not) a meaningless one. If, for instance, one wishes to determine whether policy X is in accord with the ideology (where the ideology is expressed by some finite set of statements $Y_1, \ldots, Y_n$), then this presupposes a non-vacuous and meaningful formulation of the ideological statements $Y_1, \ldots, Y_n$. If the latter are systematically vague and ambiguous, then we can attach no more meaning to the statement "Policy X is in accord with the ideology" than we can to the statement "Policy X conflicts with the ideology".

Most of the descriptive or predictive statements of the ideology are indeterminate in this way; there are occasionally specific and explicit statements in the action-program, but the action-program is constantly changing; the basically unchanging status of such basic principles in the doctrine as the withering away of the state or the disappearance of exploiting classes under socialism is achieved at the price of conceptual

precision: in order to remain unchanging dogmas, these assertions must not be falsifiable; therefore they must be vague. But they have been made vague enough to avoid the appearance of contradicting very different types of policies, and thus one has difficulty in deciding whether or not any given policy was selected because of ideological principles. It is seldom that they can be viewed as logically derivable from some given ideological principle.

Moreover, many of the statements of the ideology are not descriptive or strictly predictive, but *normative* or valuational: i.e., they express the desirability of certain situations and set forth certain goals to be achieved in the future. Thus they are not statements about what *is*, but about what *ought* to be. Such statements are notoriously slippery when it comes to determining their logical relationships, and since no workable system of logic for handling normative statements has yet been developed, this makes it additionally difficult to apply logical principles to Marxist-Leninist ideology.

All this casts doubt on the possibility of a logical analysis of the interrelationships of the ideological doctrine and action-program and policy, even though some outstanding Western commentators still try to do so. [8]

Perhaps more to the point is the criticism made by Barrington Moore concerning Soviet ideology:

"That the product . . . is not a symmetrical and logical system of political philosophy is scarcely surprising. Equal contradictions of logic and fact may be found in the case of any functioning political formula, including that of Western democracy. Nor is it surprising that the Soviet political formula is immune to logical attacks upon it by intellectuals nourished in another tradition. It has long been recognized that the power of ideas does not depend upon their logical coherence alone, but also upon the social functions that they perform." [9]

However, two related points should be added to Moore's criticism. One is that the contradictions in Western democratic politics are of a different order than similar contradictions within Soviet ideology and policy; the other is that the Soviets themselves place a great deal of emphasis on the logical coherence of their ideology and philosophy.

One must distinguish between political doctrines which have been codified by a great deal of theoretical discussion, and those which have survived without having had their theoretical bases rationalized to any

significant degree. Relatively little of the conceptual structure of Western democracy has been worked out in exact theoretical detail: the fact that we usually refer to it as the *tradition* of democracy rather than as a *philosophy* or *science* is indicative. Our form of democracy has developed over several hundred years, and is to a large extent based on the pragmatic, non-centralized process of common law. Inconsistencies are plentiful, but somehow in the free give and take of this form of democracy, the inconsistencies have never seriously endangered its existence. In contrast, the doctrine of Marxism-Leninism has received almost an over-abundance of theoretical discussion and codification. It is a body of doctrine, a theory, and to the non-specialized observer, it often seems to be a unified *Weltanschauung* which offers an answer for everything. When a political theory has been codified to such an extent, the question of internal consistency is more pressing than in the case where no such codification has taken place and a pragmatic system of checks-and-balances still operates. The price of the Marxist-Leninists' codification is paid in the necessity of having to seem more consistent precisely because inconsistencies in such an ideology are more obvious.

Secondly, one must distinguish between systems which demand a high degree of *partijnost'* (party-mindedness) of their followers and those which do not. In Western democracy, no claim is made for the universality of political doctrines, and apoliticality is not regarded as a mortal sin. In the Soviet Union, however, considerable demands are made upon the citizens, especially the members of the Party and the bureaucracy, to study and accept the tenets of Marxist-Leninist thought. Moreover, since blind faith is not officially sanctioned, the whole political education is couched in what attempts to be 'rational' terms; the elaboration of the ideology has resulted precisely from the assumption that its acceptance must be 'justified'. The cohesiveness of the Party apparatus places a premium on the constant interpretation of the doctrine. When such demands are made in the name of 'rational, scientific' thought, the consistency of the doctrine becomes imperative, for to the extent that glaring inconsistencies are tolerated, the complete acceptance of the doctrine is endangered – 'doublethink' and the Russian tendency toward *vran'ë* not to the contrary.[10] Again, the premium paid for the emphasis on ideology is the necessity of avoiding obvious inconsistencies. Thus there are factors operating within the Soviet use of ideology which tend to make it impos-

sible to dismiss the problem of the logical coherence of the ideology and related policy, even though most Western observers may regard the elimination of the inconsistencies as a relatively hopeless enterprise.

V. PHILOSOPHY AND IDEOLOGY

With this fact in mind, we can now take up the rôle of philosophy in the ideological structure. The logical connexions between Marxist-Leninist philosophy and the ideology are difficult to determine: from a strictly logical point of view, either the ideology or the philosophy could exist without the other, and it is merely a matter of historical fact that they are both considered to be 'Marxism-Leninism'. The dialectical aspects of the philosophy came from Hegel, who was a devoted supporter of the Prussian regime which Soviet ideologists regard as reactionary. As for the 'materialism' of Marxist-Leninist philosophy, it is based on the ontological concept of matter as the sole substance of the universe, and not on the ethical sence of materialism, which attaches importance to economic wealth. Neither the dialectic nor the materialism are incompatible with an ideological doctrine quite at odds with Marxist-Leninist doctrines like the elimination of private property, dictatorship of the proletariat, etc. And conversely, although Marxist-Leninist ideological doctrine may need to appeal to a philosophical *Weltanschauung* which views change as important (thus ruling out the possibility of its using, say, a static monism), there are many such possible alternatives other than dialectical materialism.

On this subject the Soviets have been on the defensive in recent years, since the revisionists in other Communist countries have denied that Diamat and Histomat are related, and have urged that Histomat be replaced by a scientific sociology. The Soviets have continued to assert publicly that Diamat and Histomat are directly connected, but there is evidence that Histomat doctrines are the subject of much discussion recently in the Soviet Union.[11]

Soviet leaders – especially Lenin, and to a somewhat lesser extent, Stalin – have tried to establish a relationship of logical causality between the philosophy and the ideology, and then to policy decisions. These attempts have seemed far-fetched to anyone trained in systematic logic, for the result has largely been a farrago of *non-sequiturs*. Yet, however

bad these attempts may seem, the fact remains that Soviet ideologists regard philosophy as important, and they use it to play a rôle in their over-all schema.

This rôle seems to be that of an 'authentication' of the ideology; i.e., a supposedly relevant part of the philosophy is quoted so as to give authenticity to the ideological principle in question.[12] It should be emphasized that although the direction of causality purportedly goes from the philosophy to the ideology, it is not the philosophers who dictate to the Party ideologists, but rather vice versa. The philosophers merely provide the necessary 'authentication' as the Party ideologists demand, so that although the logic of the conceptual structure should proceed in one direction, the power structure actually works in the opposite direction.

This *authentication* of ideology and policy often takes the form of numerous quotations from the Marxist-Leninist 'classics'. Since Marx, Engels and Lenin were extremely prolific writers, and often changed their minds over a period of time, their works provide a fertile field for exegesis by an ideologist seeking authentication of some particular policy or doctrine. Thus it is not unusual to find different quotations from Lenin being used to support policies which conflict with each other.

This Soviet phenomenon of constant citation of the classics as a justification for a given policy is a phenomenon which appears strange to Westerners. It seems particularly strange when scientific theories are included among the 'authenticated' subjects. A comparable phenomenon in Western science would be a compulsion to quote our political philosophers of the past whenever scientific questions arose. John Stuart Mill was both a leading political philosopher and scientific methodologist who contributed much to our democratic traditions, but no Western scientist would think of citing him as an authority in an article on subnuclear particles in the same way that Soviet scientists quote Lenin on the 'infinity in depth' of matter. Similarly, some of the curious authentications of relativity theory made by quoting Engels' views on space and time seem about as quaint as quoting Thomas Jefferson on the same subject, even though the latter was a highly scientific inventor.

Such authentication by means of the Marxist-Leninist classics has often impeded the proper philosophical interpretation of recent scientific discoveries. Why the out-dated views of certain Marxists of the last

century should still continue to be regarded as fundamental truths remains a mystery; but a few cautiously worded remarks in some recent Soviet articles indicate that there is presently a trend at work in the Soviet Union to 'historicize' certain works of Engels and Lenin, and to admit that even these 'great thinkers' cannot be expected to have foreseen all the possible developments of contemporary science. This will hopefully lead to less interference in science by philosophers who know little about the subject. The relationship between the philosophers and certain fields of science is different from that existing between the philosophers and the ideology; whereas most Soviet philosophers have not dared to clash with the Party ideologists, they have had no such compunctions about dictating to scientists. In such cases as relativity theory, the scientists have been able to shrug off the philosophers' attacks, and the scientific work has not been hindered. In other fields, however, such as mathematical logic and cybernetics, resonance theory in chemistry, quantum mechanics and cosmology, the principles of Marxist-Leninist philosophy have had varying degrees of success in hindering scientific development. If there is any segment of Soviet life where Marxist-Leninist philosophy has had a direct, genuinely causative influence, it has been in its relationship *vis-à-vis* contemporary science. This is in contrast to its influence on the Party doctrines, which is only indirect and is cast in the guise of the process of authentication mentioned above.

VI. NON-LOGICAL RELATIONSHIPS

Having explored the various logical relationships existing between the official philosophy and ideology and Soviet policy, and having come to the conclusion that genuine logical relationships are more appearance than fact, we may now raise the question of what non-logical or empirical relationships exist. This is a more difficult field to explore: the realm of logical relationships can be explored, arm-chair fashion, by anyone familiar with official Marxist-Leninist ideology and Soviet policy, using only the rules of logical deduction and analysis. But tracing the empirical factors which operate between the ideology and policy demands first-hand information about the Soviet power elite which is virtually unavailable to anyone outside that elite. For this reason, no such analysis will be attempted in this paper; rather, we will try to sketch some guidelines

about how such an analysis might proceed, given what information is available to outsiders.

First of all, it is important to limit the concept of ideology to a definite body of doctrines and assumptions, rather than to allow it to degenerate into a loose psychological concept meaning 'a way of looking at the world'. Marxist-Leninists tend sometimes to use the term 'ideology' in the latter sense; the early Marx and Engels equated 'ideology' and 'wrong consciousness', and thought of ideology primarily as a deception. The Soviet usage has stressed that 'ideology' does not have a totally pejorative sense, that there are right and wrong ideologies, and Marxism-Leninism is a correct, scientific ideology. However, some Soviet philosophers have gone so far in understanding 'ideology' as a psychological concept that their discussions on the relationship between ideology (in this sense) and cognition seem to be systematically ambiguous, although some of them have recently tried to sort out these questions.[13]

In preferring to preserve the term 'ideology' as a designation for the body of doctrines and assumptions used by Marxism-Leninism, we are not denying that adherence to and belief in these doctrines may influence a man's way of looking at the world; in fact, this is one of the crucial problems about the non-logical relationships between ideology and policy. If a Soviet has been exposed to Marxism-Leninist philosophy and ideological doctrines all his life, he may in fact view things so differently from a non-Marxist that he could not even agree to a common description of these things. Perhaps someone who accepts the tenets of dialectical logic really does 'perceive things dialectically', whatever that means. In such cases, the Marxist-Leninist ideology would have an important indirect influence on the choice of policies, but the analysis of this influence would have to be cast in psychological terms. Verification of this analysis would obviously depend on widespread psychological testing of the Soviet power elite, and since this is totally out of the question at present, any such analysis must be based largely on speculation. While psychological analyses of this sort may be quite relevant or even crucial, they are not presently available.

What is perhaps more relevant is to continue to determine what doctrinal deviations occur in the ideology. Up to this point in our discussion, we have dealt exclusively with the officially promulgated ideology, since it forms the doctrine and action-program in whose name the policies are

made. However, it may be useful to distinguish two additional sets of convictions which are undoubtedly factors in determining Soviet policy: the operating doctrine of the top leadership, and the more loosely interpreted views of the lower echelons of the Party and state bureaucracy. The operating doctrine of the leaders is evidently an informal schema, derived in part from the official ideology insofar as adherence to it must be maintained, but also derived from the leadership's estimate of what actions are feasible. In essence it is very likely a compromise between Marxist-Leninist dogma and more traditional power considerations. Analysis of it at present is dependent upon such unreliable first-hand sources as Khrushchov's interviews and comments to foreigners, and occasional leaks from other high sources; but assuming that visible policies are, within limits, the direct implementation of this operating doctrine of the leadership, one can make reverse inferences as to its nature. Such inferences from policy back to doctrine are less possible in the case of the convictions of the bureaucracy, but first-hand observation is somewhat easier, inasmuch as the lower echelons are more available to the public, and there are a wide number of other indicators, including the Soviet press, which can be used to elicit data on the thinking of the Party members and the bureaucracy. The bureaucrat's views seem to be a more diffuse mixture of ingredients taken from the official ideology which he has been taught, the leadership's operating doctrine of which he is the agent, and his own interpretations, misunderstandings and outlook arising from the problem of reconciling plans with action.

By comparing these two operating doctrines with the official ideology one may be able to get a clearer insight into the doctrinal factors which are influential in determining Soviet policy, as well as an evaluation of the extent to which the official ideology is still reconcilable with actual policy.

We have already spoken above about the authentication of the official ideological doctrine and action-program in terms of the tenets of Marxist-Leninist philosophy. From the frequent references to ideology made by the Soviets it is obvious that a parallel authentication of their policies is made in terms of the ideology. In evaluating the pattern of this latter authentication, it might be well to consider it as following three approaches: the naïve, the honest, and the cynical. The naïve approach is perhaps the least interesting and the least existent, except among Party

activists: it amounts to an uncritical belief that all policy does in fact follow directly from the ideology, and that no contradictions between the two exist. The honest approach is the one taken by those Party members and bureaucrats who realize that there are discrepancies, and who work hard to remove them, or more usually, to explain them as temporary or necessary. The third approach, usually one which only the top leaders can afford, is simply the cynical recognition of the irreconcilability between a certain policy and the ideology, while at the same time deliberately maintaining that the policy does follow from the ideology. This approach plays a large rôle in the 'masking' function of the official ideology described below.

VII. FUNCTIONS OF THE OFFICIAL IDEOLOGY

Instead of answering the question "What rôle does Marxist-Leninist ideology play in determining Soviet policy?" in all-or-nothing terms, it may be more useful to distinguish several different rôles and functions of the ideology. There seem to be three such functions: a *masking* function, an *authenticating* function, and a *directive* function.

The *masking* function is what was no doubt meant by Karl Mannheim when he said that "ideologies are mental fictions whose function is to veil the true nature of a given society". Marxist-Leninist ideology has sometimes taken on this rôle in Soviet society, and some of the present indoctrination and constant references to ideological principles help to cover over the fact that many of the goals of the revolutionary movement, such as the withering away of the state, are being disregarded – often in the name of the ideology itself. This masking function probably reached its highest level of usage under the cynical rule of Stalin, but even now the ideology sometimes serves less as a genuine master plan than as a hollow schema to which lip service is paid in order to deflect attention from current realities.

The second rôle of the official ideology is often to fulfil an *authenticating* function. As mentioned above, certain promulgated policies are justified by citing the doctrines of the ideology, and sometimes even by quoting the philosophical 'classics' of Marx, Engels and Lenin. Often there is no *logical* connexion between the cited doctrines and the chosen policy, but the *psychological* bridge thus established, whether logical or not, seems

to be of great importance to the Party members and citizens of the Soviet regime. As was pointed out in section IV above, the Soviet insistence on the *partijnost'* of its citizens entails that the ideology be used to provide a sense of continuity between goals and policies. At times this authentication amounts to a mere *ritualization* or stylized repetition of the ideological slogans, similar to the oratory heard in America on the Fourth of July.

Lastly, there is the *directive* function of the ideology, namely to serve as a guide for choosing policy and implementing it. The ideology stressing analysts mentioned in section II have argued that this is the primary function of the ideology. However, if one had to choose which of the three functions was 'primary', a better case could be made for the authenticating function than for the other two, for it is the broadest of all, and in a sense overlaps the other two. At one end of the spectrum, in cases where policy is chosen strictly in accordance with the ideological principles, then the ideology serves a directive function. At the other end of the spectrum, in the cases where policy runs counter to certain ideological principles, repeated references to the ideology are part of its masking function. And in the middle range of cases where no causal connexions seem to be applicable, the references to the ideology are part of the authenticating function. Yet in a sense, all the references to the ideology, whether genuine, pseudo-scientific or deliberately cynical, are part of the authenticating function; while the masking and directive functions are more or less mutually exclusive because of the contrary situations to which they apply, the authenticating function is present whenever policy is defined and justified in terms of the official ideology. It not only operates by itself – in the middle range where the other two functions are not operating – but also, in a secondary rôle, together with each of them at either end of the spectrum.

VIII. REVISION OF THE OFFICIAL IDEOLOGY

This writer does not propose to add anything more to the controversy between the ideology-stressing and *Realpolitik* analyses outlined in section II. It seems fairly evident that traditional power considerations and the special form of Marxist-Leninist ideology both play important rôles in shaping Soviet policies, and any complete explanation of the system must take account of both factors.

Certain policies have obviously been detrimental to the national interests of the Soviet Union, and can be explained only in terms of ideological commitment. The most obvious example is perhaps the revolutionary social and economic changes which were forced on the East European countries in the decade following the Second World War; the resulting upheaval was to the serious detriment of the economies of those countries and the economic strength of the Soviet bloc in general. Another example is the continuing crisis of Soviet agriculture, where a less rigid adherence to the ideological doctrines would probably result in agricultural surpluses in a relatively short time.

On the other hand, no nation seems to be able to escape the dictates of international power politics, even the Soviet Union. A number of Soviet foreign policies, particularly the treaty of Brest-Litovsk and the Molotov-Ribbentrop pact of 1939, have shown that even ideology must be foregone when the existence of the Soviet Union is seriously threatened. Moreover, even in domestic policy, the Soviets have found that certain traditional socio-economic factors cannot always be subjected to Marxist-Leninist doctrine; the NEP and even the present existence of such 'bourgeois' institutions as incentive wages, inheritance of wealth, etc., all testify to Soviet adaptability in this regard.

When these considerations force the Soviet leadership to adopt policies which deviate from strictly orthodox Marxism-Leninism, a choice must be made between reconciling the ideology-policy rift in some manner, or permitting the conflict to stand. There have been notable cases where a contradiction was openly admitted: one example was Stalin's admission that the increase in the state's power just prior to its promised 'withering away' was a contradiction. Stalin fell back on the dialectical argument that contradictions are both inevitable and necessary reflections of reality, and since the dialectical logic which is part of Marxist-Leninist philosophy tolerates such contradictions, Stalin's argument was one 'consistent' with the over-all ideology. Thus, if one cannot get rid of a contradiction within the ideology or between ideology and policy, one can always refute one's more orthodox Marxist-Leninist critics by pointing out that such contradictions are justified by dialectical logic. Moreover, Communist ethics allows and sometimes even encourages compromise and tactical concessions, and Lenin himself often used this argument.

If a decision is made to reconcile the ideological rift instead of admitting the existence of a contradiction, then the masking function of the ideology may come into play: a sufficiently vague part of the ideology will be stressed over and over as 'justifying' the policy, and if these references are repeated enough times, they may serve to divert attention away from the contradiction and conceal its existence. Or, the ideological principle which is in conflict with the policy may be revised – an alternative which many commentators overlook. There have been numerous occasions when the Soviet ideologists have reshaped and redefined ideological principles when it suited their purposes. Thus when the law of the unity and conflict of opposites seemed to imply that revolution was possible against the Soviet regime, the philosophers came up with the distinction between 'antagonistic' and 'non-antagonistic' contradictions. Similar considerations led Stalin in 1950 to formulate the distinction between *vzryvy* (explosions) and non-explosive leaps in the law of the transition from quantity into quality. When the basic interests of the regime are at stake, conflicts between policy and determinate parts of the ideology are sometimes resolved at the expense of the ideology. It is either given a new interpretation consistent with the policies of the regime, or it is made sufficiently vague so as to ensure that no conflict is possible.

IX. SUMMARY AND CONCLUSIONS

This article has tried to present a schema which can be used to evaluate the rôle of Marxist-Leninist ideology in determining Soviet policy. Two components of the ideology which can be distinguished are the *doctrine* and the *action-program;* a third component, the *philosophy,* does not actually belong to the ideology proper, since there are few logical connexions between them, but it is often used to *authenticate* the ideology. The ideology itself is normally so *indeterminate* in its formulation that very few logical relationships within it or between it and policy can be validly assessed; instead, the official ideology seems to serve three functions with respect to policy: *masking, directing* and *authenticating,* the latter of which seems to be the most important function.

One final note which might be mentioned is that the Marxist-Leninists have two different and somewhat inconsistent approaches to the problem of truth. One is their doctrine of the unity of theory and practice, the

other is their characterization of the 'classics' of Marx, Engels and Lenin as fundamental truths from which all else follows. The doctrine of the unity of theory and practice often turns out to be a rather pragmatic approach to truth, although the Marxist-Leninists would angrily deny the label of 'pragmatism'. Yet they emphasize that problems arising in practice are what spurs the development of theory, so that true theory is what reflects successful practice. How this is to be reconciled with the concept of the 'classics' as fundamental truths is one of the as yet unresolved dilemmas of Marxist-Leninist theory, and may be both symptomatic of and responsible for some of the similar problems in the ideology-policy sphere.

We have tried to show that Marxist-Leninist ideology cannot be derived from Marxist-Leninist philosophy, and we have also indicated our doubts about the success of any attempt to analyze the relationship between ideology and policy in purely logical terms. This does *not* mean that analysis of Marxist-Leninist philosophy is superfluous, nor that such an analysis of the philosophy taken by itself cannot be made in logical terms. If Marxist-Leninist philosophy is a systematic intellectual *Weltanschauung* (as the Soviets claim it is), then it is subject to the same rules of logical consistency and freedom from self-contradiction as any other philosophical system. Our own assessment is that it is a farrago of inconsistent doctrines, and needs to have these inconsistencies brought out by rigorous logical analysis. Because of the rôle which the philosophy has in relation to Soviet science, and because of the use, however irrelevant, to which it is put in authenticating Marxist-Leninist ideology, it seems evident that such logical analysis of Soviet philosophy will continue to remain an important task of Sovietology.

REFERENCES

1. This article is a revised version of 'Marxistisch-Leninistische Ideologie und sowjetische Politik', a speech read on April 3, 1962 before a congress on Marxism-Leninism held at the Osteuropa Institut of the Freie Universität in West Berlin. The author would like to thank the Rockefeller Foundation for making it possible for him to attend the congress. The research resulting in this publication was made while the author was the recipient of a grant from the Ford Foundation, but the conclusions and opinions expressed therein are those of the author and are not necessarily shared by the Ford Foundation.
2. This position has been expounded in probably its most extreme form by Prof. Samuel L. Sharp in 'National Interest: Key to Soviet Politics, *Problems of Communism,* VII (March-April 1958), 15–21.
3. This position has been put forward with differing modifications by the late R.N. Carew Hunt and Prof. Zbigniew Brzezinski; see Carew Hunt: 'The Importance of Doctrine' *Problems of Communism,* VII (March–April 1955), 10–15; Brzezinski: *The Soviet Bloc,* New York, 1960, and Brzezinski: 'Communist Ideology and International Affairs', *Journal of Conflict Resolution,* IV (September 1960), 266–291 (reprinted in Brzezinski: *Ideology and Power in Soviet Politics,* New York, 1962; see the review of this book on p. 337 of the present issue of *SST*).
4. *The Soviet Bloc,* p. 384.
5. *Ibid.,* p. 387. I would like to thank Prof. Brzezinski for his helpful criticisms of an earlier working paper from which this article was prepared.
6. Readers who are unfamiliar with these laws and doctrines will find them explained in the following books: Joseph M. Bocheński: *Der sowjetrussische dialektische Materialismus,* 4th ed., Bern-München, 1962; Gustav A. Wetter: *Dialectical Materialism,* New York–London, 1958; and H. B. Acton: *The Illusion of the Epoch: Marxism-Leninism as a Philosophical Creed,* London, 1955.
7. I am indebted to Dr. Thomas Blakeley for clarification on this and a number of other points.
8. See Gustav A. Wetter: 'The Soviet Concept of Coexistence', *Survey,* No. 30 (October–December 1959), 19–34, where he frequently speaks of logical deductions from Marxist-Leninist laws.
9. Barrington Moore, Jr.: *Soviet Politics: The Dilemma of Power.* Cambridge, Mass. 1950. p. 224.
10. For an excellent study of *vran'ë* and its rôle in Russian society, see Ronald Hingley: 'That's No Lie, Comrade', *Problems of Communism,* XI (March–April 1962), 47–55.
11. For an account of these developments, see Constantin Olgin: 'The Crisis of Historical Materialism', *Bulletin* (Institute for the Study of the USSR, Munich), VIII (October 1961), 3–20.
12. I am indebted to Prof. J. Miller for reminding me of the importance of this rôle of philosophy; the term 'authentication' is his.
13. See Helmut Fleischer: 'The Limits of 'Party-Mindedness'', *Studies in Soviet Thought,* II (June 1962), 119–131.

NOTES AND COMMENTS

LOGIC, DIALECTICAL AND OTHER

The voluminous work of V. I. Čerkesov, *Materialističeskaja dialektika kak logika i teorija poznanija* (Izd. MGU. 1962, 478 pp.), deals in its first chapter (pp. 12–79) with the history of the problem of logic as related to the theory of knowledge in Soviet philosophy. This is the first attempt by a Soviet philosopher to describe a portion of this history: up to now, only Western historians of philosophy (Wetter, Joravsky, Kline and the author of this note) seemed to have been interested in the subject.Čerkesov proceeds chronologically and examines successively the literature of the third decade of this century (pp. 12–47), the fourth (pp. 48–52) and then the literature on formal logic after 1940 (pp. 53–65) and the writings on philosophy of logic since 1950. The following authors receive particular attention: A. M. Deborin, I. K. Luppol, A. Var'jaš, I. E. Orlov, V. F. Asmus, K. S. Bakradze; while, among recent writers V. P. Rožin, V. I. Mal'cev, T. I. Ojzerman, G. Gak, M. M. Rozental', V. P. Tugarinov and Todor Pavlov are discussed. As can be seen, the list is by no means exhaustive; however, it seems that the author was able to present the essentials of the development of the discussion. The following titles are quoted from the earlier literature:

Deborin, A.: *Lenin kak myslitel'*. Moskva-Leningrad. 1929.
'Gegel' i dialektičeskij materializm'. In Gegel': *Sočinenie*. tom. 1. Moskva-Leningrad. 1930.
Dialektika i estestvoznanie. Moskva-Leningrad. 1929.
Filosofija i marksizm. Moskva-Leningrad. 1930.
'Dialektika u Kanta'. In *Arxiv Marksa i Engel'sa*. tom. 1. 1924.

Luppol, I. K.: *Lenin i filosofija*. Moskva-Leningrad. 1930.

Orlov, I. E.: 'Logika formal'naja, estestvennonaučnaja i dialektičeskaja'. *PZM* * 1924, 6–7.
Logika estestvoznanija. Moskva-Leningrad. 1926.
'Logičeskoe isčislenie i tradicionnaja logika'. *PZM* 1925, 4.

* *Pod znamenem marksizma*

Var'jaš, A.: *Logika i dialektika.* Moskva-Leningrad. 1928.
Dialektika u Lenina. Moskva-Leningrad. 1928.
'Formal'naja i dialektičeskaja logika'. *PZM* 1923, 6–7.
Sarab'janov, V.: *V zaščitu filosofii marksizma.* Moskva-Leningrad. 1929.
Asmus, V. F.: *Dialektika Kanta.* Moskva. 1930.
Dialektičeskij materializm i logika. Kiev. 1924.
'Formal'naja logika i dialektika'. *PZM* 1929, 4.
Mitin, M. B.: *Boevye voprosy materialističeskoj dialektiki.* Partizdat. Moskva. 1936.
Obickin, G.: *Osnovnye momenty dialektičeskogo processa poznanija.* Moskva-Leningrad. 1933.

Among the more recent publications, the following are worth mentioning:

Čelpanov, G. I.: *Učebnik logiki.* Gospolitizdat. 1946.
Popov, P. S.: 'Nekotorye osnovnye voprosy logiki v svete marksistskoj teorii'. In UZ MOPI, tom 23, vypusk 1. 1954.
Bačmanov, V. S.: 'Javljaetsja li formal'naja logika filosofskoj naukoj'. In UZ LGU 247, vypusk 12. 1957.

However, in reading over Čerkesov's book one finds that he writes "the 'works' of Wittgenstein" (p. 115) and "the 'analysis' of Carnap" (p. 117). What can this possibly mean? As the author has rather vague notions about the scientific use of quotation marks – which would be, in any case, out of place in such a context – one must suppose that for him the works of Wittgenstein can only metaphorically be called 'works' and that the analyses of Prof. Carnap are metaphorically referred to as 'analyses'. But as nobody who has read these works and analyses can have the slightest doubt that they are, respectively, works and analyses – be they valuable or worthless – the quotation marks must be meant to express the dislikes of Mr. Čerkesov. He just wants to say that he despises both Wittgenstein's works and Carnap's analyses. An expression of such feelings in print is an insult to the memory of the thinker whose influence is still so great and to the philosopher who is respected everywhere – even in the Soviet Union, where at least one of his works has been translated. This incident shows that some Soviet philosophers are still where most of them were before the death of the 'great' Stalin. But now there seems to be no excuse for such an attitude. *J. B.*

The book of E. Gellner, *Words and Things,* has been translated into Russian and should appear during the last quarter of 1962 in the IIL. *J.B.*

The *sbornik, Očerki po istorii logiki v Rossii* (under the editorship of Prof. P. I. Nikitin), contains, in addition to much material concerning rather theory of knowledge than logic, a valuable study by N. I. Stjažkin on Poreckij ('Logičeskie nasledstvo P. S. Poreckogo'. pp. 126–154). *J.B.*

QUOTATIONISM

The practice of 'quoting authorities' in science was attacked in an article in *Literaturnaja Gazeta* (February 24, 1962), written by V. V. Parin, professor at the Central Institute for Advance Medical Training. Parin's article also gives an interesting appraisal of the Pavlov Conference (a joint session of the Academy of Sciences and the Academy of Medical Sciences held from June 28th to July 4th, 1950, on "Physiological Problems in the Theory of I. P. Pavlov"), although Parin admits that "for reasons which were beyond my control I took part neither in its work nor in the events that followed" – a veiled reference to his own removal from circulation during this period. Since Parin is appropriately vague about the events of the conference, some historical facts might be added here: it was at the Pavlov Conference that K. M. Bykov launched his famous attack against L. A. Orbeli, accusing the latter of "distorting" Pavlov's views and "failing to exploit the Pavlovian heritage". Although Orbeli was the man to whom Pavlov entrusted the Pavlovian tradition at the time of his death in 1936, Orbeli's work on the sympathetic nervous system drew fire from the supporters of Lysenko, and at a meeting of the Praesidium of the Academy of Sciences in 1948, Orbeli was unmercifully attacked and stripped of his secretaryship of the Division of Biological Sciences. After Bykov's scathing attack at the 1950 Pavlov Conference, Orbeli was stripped of his directorship of two important physiological institutes, and he remained the subject of numerous vituperative articles by Bykov and others for several years afterwards until his eventual rehabilitation in 1955 and his appointment a year later as director of the new Sečenov Institute of Evolutionary Physiology. Orbeli died in 1958; Bykov died in 1959. Of this conflict, Parin makes no mention, except to say that at the conference "the fruitful research conducted for many

years by L. A. Orbeli and other physiologists was given an altogether incredible appraisal, which if we paraphase one of I. Selvinskij's poems, may be reduced to the following two lines: 'It pains to think that all his life / was just a catalog of big mistakes'".

Parin states that Pavlov himself would have been shocked had he known that his works were "being converted into some sort of hybrid of a prayer book, a stick for intimidating 'heretics'. In 1950 however, a group of Pavlov's pupils announced that they possessed a monopoly on truth, that they were the protectors of the purity of their teacher's heritage. Pavlov's works, all his deductions and hypotheses, were proclaimed as the summit of knowledge, and many 'fraternal' trends were 'condemned' for their departure from the 'highroad of science', i.e., for their independence". "The arguments were based on quotations garbled from the works of the great physiologist rather than on facts confirmed by experiments. ... The works of many physiologists were subjected to shattering criticism because, in the opinion of the 'critics', these works contained very few 'references to Pavlov' and even because the scientists had advanced new ideas. ... Had the veto of the dogmatists been effective, we still would know nothing about important laws. ... However, some of our 'orthodox Pavlovites' are still stuck at the ancient level of techniques and methods of experimenting. And it is this 'purity' of experiment that they consider an achievement!"

Parin mentions a recent attack made on P. K. Anoxin because the latter departed from Pavlov's heritage by using complex electro-physiological methods in his study of the higher nervous activity of animals. Parin decries using quotations from old works to substantiate scientific arguments instead of finding fresh experiments. "A nihilistic attitude toward the creative wealth inherited from the scientists of the past is impermissible. But the conversion of this heritage into dogma is equally dangerous... However deep our appreciation of his heritage, we have no right to forget that the development of physiology and the investigation of biological laws did not end with I. P. Pavlov." Parin makes a number of specific accusations about occasions when attempts to "arrange facts to fit in 'with Pavlov' or 'with Bykov'" held back Soviet medicine several years. Parin ends by stating that true science "does not seek to hide behind the authority of either the great scientists of the past or the leading scientists of the present". *D.D.C.*

A little on the lighter side, it seems that the 22nd Party Congress has really squeezed the last drops of juice from the Stalinist philosophical lemon. The sole quotation from Stalin's works which appeared in the *Osnovy marksistskoj filosofii* of 1958 has been dropped from the 1962 reprinting (as a textbook). But, the trick lies in the smooth way Rozental' – a scissors-and-paste man from way back – has done it. Rather than change the wording of the passage in question, he has touched up the linking phrases, struck the quotation marks and eliminated the reference to Stalin. In other words, the quotation marks are gone but the nonsense lingers on (cf. 1958 edition p. 247 and 1962 edition p. 207). *H.F.*

ON IDEOLOGY

Karl Nielsen in his article, 'On speaking of God' *(Theoria,* 1962, 28, 110–137), offers an interesting analysis of what he calls 'ideological sentences' or 'I-sentences'. They have, according to him, the following characteristics (pp. 118 f.):

1. They are not verifiable
2. In order to be effective, they should not be recognized as I-sentences
3. They express certain committments of their users
4. Their users resist any translation into non-I normative sentences
5. The user asserts that the I-sentence says something more than the normative sentence, but this 'more' remains mysterious
6. This 'mysterious objective nature' has great value for the users; it enables them to claim a scientific and/or absolutistic basis for their claims
7. That a sentence is an I-sentence cannot be seen from its grammatical structure alone, but its use must be examined.

Nielsen gives as instances of I-sentences the following: (1) Men were created free though everywhere they are in chains. (2) The history of mankind is governed by the iron laws of dialectic. (3) Modern man is alienated. (4) The self is the bearer of the cross of disvalue. (5) All men possess an all-pervasive and ineradicable tendency to sin (pp. 121 f.). The importance of Nielsen's analysis seems to be this: while it is generally recognized that the truth conditions of ideological sentences, if any, must be very different from those of scientific sentences, relatively little

attention has been paid up to now to the meaning of such sentences; and this is what Nielsen examines here. Also his remarks about the relations between (first-order) religious speech and ideological speech (the article is devoted to problems of philosophy of religion) are not without interest. For it has often been said that ideology is like a religious faith, but very seldom *what* the resemblances and differences really are. *J.B.*

HUNGARY

The Marxist-Leninist training of future Party and State functionaries is intensified in Hungary.

Until 1959 higher ideological training took place either at the Faculties of Marxism-Leninism of the Universities and other schools of higher education, or at the National School of the Party. While at the Universities all students had to submit to examinations in Marxism-Leninism, students could also choose it as their major study. In the latter case a State-examination followed after four years, qualifying the student for higher Party posts as well as for other State offices. The Party School trained exclusively future functionaries.

In 1959 the Faculties of Marxism-Leninism at the Universities began a series of evening courses for students who worked during the day. At the same time the development of 'County Party-Universities' was undertaken. In every county *(comitat)* where no regular University could supply higher ideological training, Party-Universities were set up for the training of Party and State functionaries, ideological propagandists and intellectual workers.

These new Party-Universities were the subject of a recent discussion of the Political Committee. The resolution states that the level of these schools must be improved and the training program intensified. Henceforth the one-year course at the Party Schools and the evening courses at the Universities must be followed by two years of specialized training. Thereafter students may submit to examinations and if successful receive a State degree.

The daily newspaper of the county of Somogy reports that the evening course of the new County Party-University is so popular that the three classes of last Semester had to be enlarged to four from September of this year. *E.L.*

BULGARIA

Dobrin Spasov, professor at the University of Sophia, published a survey of Bulgarian philosophy in the (Polish) magazine, *Ruch Filozoficzny* ('Spojrzenie na współczesną bułgarską myśl filozoficzną'. RF 21, 1962(2), 133–140). We learn that the peculiar attitude of Todor Pavlov (*1890) – the leading Bulgarian philosopher – is due to the fact that whatever philosophy was present in Bulgaria before 1944 was dominated by the thought of Dimitr Michalcev (*1880), a follower of Rehmke. The doctrine of Pavlov is, however, now criticized by his younger colleagues, among others by A. Kiselencev and A. Gavrilov. There are two epochs of Bulgarian Leninist philosophy, divided by the time between the 21st and 22nd (Soviet) Party Congresses. As yet, the situation does not look good, according to the author. "Most of our philosophers try to explain our accelerated development on the road to Communism" by concrete sociological inquiries. A large part of them are studying "esthetics and ethics which are, with us, outside philosophy". However, esthetical studies have brought only "superficial analyses of some esthetic categories". The state of ethics "is still more difficult"; only one book on the subject was published (by A. Il'ev), while a number of younger authors are "talking about Communist morality". The psychologists were busy up to now mainly with the "philosophical problem", i.e. they conducted "fruitless discussions about the mutual relations of the mind and the physiological". Interest for modern symbolic logic is "increasing". But, there is more knowledge and more adequate criticism of "capitalist philosophy". Earlier, they viewed this philosophy as "one dirty stain, stinking with reaction and menacing Mankind" (all quotations from p. 139). The author states that he is attempting to give an account of the situation "in the not yet dispersed smoke" of the "cult of personality" (p. 136). *J.B.*

A DISCREPANCY

Two apparently unrelated dates which appear in Volume I of the *Filosofskaja enciklopedija* (Moscow 1960) jointly generate a philosophically marginal, but not uninteresting, puzzle. On page 316 there is a brief biographical sketch of Professor Aleksej Petrovič Gagarin, late of Moscow

University, a philosopher who specialized in 'scientific atheism'. (Although his *imja* corresponds to the *otčestvo* of Soviet cosmonaut Jurij Alekseevič Gagarin, the two are not, so far as I can determine, related.) The date of Professor Gagarin's death is given as September 9, 1960 – 9/IX/60. But, at the end of the volume (p. 504), we learn that the book went to press on August 15, 1960 – "*tom podpisan k pečati* 15/VIII/60" – i.e. twenty-five days *before* the reported death.

One might assume that the date of Gagarin's death is given incorrectly – that '9/IX/60' is an error for '9/VIII/60' or even for '9/IX/59'. In fact, I can confirm that the Gagarin funeral service took place on September 11, 1960 – two days after the announced date of his death. I happen to have been in Moscow at the time and was present during part of the ceremony, held in one of the 'Old Buildings' of Moscow University, not far from Red Square.

Several hypothetical explanations of this extraordinary combination of dates come to mind.

Two initial hypotheses assume that both of the published dates are correct – at least within a 'tolerance' of two or three days. On this assumption, we are faced with the disturbing fact that a human death was unalterably recorded at least three weeks before it occurred. How might such a fact be explained? Here are two possibilities:

Hypothesis **1.1**: Gagarin's death was *predicted,* on the basis of an astonishingly precise clinical prognosis.

Hypothesis **1.2**: Gagarin's death was deliberately *caused,* and the date of it was determined more than three weeks before the event.

I am not suggesting that either of these hypotheses be seriously entertained. Although logically possible, both of them are, to say the least, unorthodox.

Of greater plausibility are two other hypotheses, one of them with three sub-hypotheses, based on the more normal assumption that the date of Gagarin's death was not known until *after* he died.

Hypothesis **2.1**: Gagarin died, not on the announced date (September 9, 1960), but on or before August 15, 1960; the volume in question actually went to press, as indicated, on that date. However, at some time subsequent to Gagarin's death, but on or before August 15, the appropriate Soviet authorities decided (for reasons of their own) to falsify the publicly announced date of his death and to postpone the funeral until September 11 in order to lend credibility to this false report.

Again, although logically possible, this hypothesis seems as contrived as **1.1** and **1.2** above.

Hypothesis **2.2**: The line of type recording Gagarin's death was not, in fact, unalterably set until September 9, 1960 – or later – i.e. at least twenty-five days after the volume is recorded as having 'gone to press'. Under this general hypothesis, we may distinguish three possibilities:

Sub-hypothesis **2.21**: The date of going to press was *unintentionally* falsified, as the result of an editorial blunder or typographical error.

Sub-hypothesis **2.22**: The date of going to press was *intentionally* falsified – e.g. as an instance of what Russians picturesquely call 'sucking statistics out of one's thumb'.

These last two hypotheses, although somewhat more plausible than **1.1** and **1.2**, do not seem entirely acceptable in the light of what we know, or think we know, of Soviet publishing practices.

We are left with a final possibility.

Sub-hypothesis **2.23**: The volume did 'go to press', as announced, on August 15, but minor changes, involving only a line or two of type, could still be made as late as September 9. This hypothesis runs counter to the accepted sense of the phrase *'podpisan k pečati'*, but it seems, on balance, more plausible than any of the other hypotheses offered above.

Note, however, that even on this relatively harmless hypothesis (as well as on the more damaging hypotheses given in **2.21** and **2.22**), serious doubt is cast on the validity of the method, common in Sovietological studies, of correlating day-to-day shifts in philosophic or ideological position with current political developments on the basis of the dates of 'going to press' announced by various Soviet books and journals.

Early examples would include changes in the attitude toward formal logic and the dialectical 'law' of the negation of the negation following Stalin's death, and changes in the degree of hospitality exhibited toward Western thinkers following Malenkov's appointment (March 16, 1954) and Khrushchov's dismissal (Feb. 8, 1955) of Academician G. F. Aleksandrov as Soviet Minister of Culture.

A recent example is the reporting of an ideological 'position statement' by M. A. Suslov in a speech delivered on January 30, 1962, the text of which was given in *Pravda* for February 4 in a form significantly different from that given in *Kommunist,* No. 3, 1962, which 'went to press' on February 17. In *Pravda's* version of Suslov's remarks, peaceful coexistence

involves the 'refusal to export revolution and counterrevolution" (*"otkaz ot eksporta revoljucii i kontrrevoljucii");* in *Kommunist's* version, peaceful coexistence involves an assertion of the "inadmissibility of exporting counterrevolution" *("nedopuščenie eksporta kontrrevoljucii")* – nothing at all being said about the export of *revolution.*

Was this abrupt change prompted by a shift, for example, in the Soviet policy toward Cuba? – Or a new intervention from the Chinese Communist leadership? – Or perhaps the first, as a result of the second? Can such a shift or intervention be independently dated as having occurred between February 4 and February 17, 1962? I cannot give any definite answer to these questions. But, suppose that such a shift or intervention could be identified as having occurred, say, on February 20. The Gagarin case, interpreted under hypothesis **2.23** (or **2.21** or **2.22**) above, would suggest that a causal explanation could be given – even though the cause in question *postdated* the officially recorded date of the effect, i.e. a political decision taken on February 20 could have been the cause for revision of Suslov's remarks as they appeared in an issue of *Kommunist* which allegedly went to press on February 17.

G. L. Kline

TWO PERSONAL NOTES

Since the publication of G. A. Wetter's *Dialektische Materialismus* and of my *Der sowjetrussische dialektische Materialismus* I have been honored several times by remarks concerning my relation to the eminent scholar from Rome. Some authors, like Joravsky *(Soviet Marxism and Natural Science* 1917–1932. London. 1961), would have my book to be a résumé of Wetter's larger work; some others, like L. N. Suvorov (*FN* 1962, 4, 54), are making out of Prof. Wetter my 'follower'.

The question of priority is, in this field, not a very important one as it is, for example, in mathematical logic. Yet, it is not very agreeable to find that one's research is reduced by some writers to the copying of another man's writings. I would like, therefore, to state the chronological order of Prof. Wetter's and my own writings and comment on my relation to him.

I happen to have published first on Diamat, namely in Polish in 1944. It was a modest contribution, written under difficult wartime conditions

and, therefore, I published it under a pseudonym (Jozef Miche: Filosofia bolszewieka. [Rome.] 1946. 94 pp.). Then Prof. Wetter published his book in Italian *(Il materialismo dialettico sovietico.* Torino. 1948); my *Diamat* comes third, followed by the German work of Wetter.

This is the order of events. As to the content, I shall be the last to deny that I learned a lot from Prof. Wetter and that I have a high esteem for his work. But, I think that everybody who has *read* these books and not just the tables of contents will agree that there are important differences between us. These are less concerned with purely historical matters – in spite of the fact that, even in this respect, we do not present the same synthesis – than with the sort of criticism of the Soviet doctrines, advanced by Prof. Wetter and myself. I may, perhaps, point out at least one basic difference: whereas Prof. Wetter was and is constantly arguing from a determined, namely neo-Thomist point of view, I have always conducted my criticism within the framework of general methodology.

The fact of the matter is: the study of contemporary Soviet doctrines is a vast field in which several researchers are proceeding on parallel lines. Prof. Wetter and myself are, fortunately, not the only ones engaged in this work. In such work, parallelism of results and mutual influence are inevitable. But, while it is simply ridiculous to make out of Wetter a 'follower' of mine, as Suvorov does, I do not think it serious either to operate the inverse reduction. *J.B.*

It is to be hoped that Soviet philosophers will acquire enough confidence in their doctrines to argue their position instead of abusing those who disagree with them with irrelevant epithets (cf. L. N. Suvorov: 'O nekotoryx priemax sovremennoj fal'sifikacii sovetskoj filosofskoj nauki'. *FN,* 1962, 4, 50–56). Philosophy is not a matter of the police in a civilized culture. Some contemporary Soviet philosophers, like Suvorov and Mitin, have not yet liberated themselves from the heritage of their Stalinist days when, instead of engaging in objective philosophical discussion, they invoked the threat of the secret police to silence those with whom they disagreed or who were not avid enough in grovelling before that great philosophic genius, Stalin, who now turns out to be a monster. Mr. Suvorov directs a stream of abuse against me for suggesting that Marxism is not identical with Bolshevist Leninism. Instead of calling me names, he would be more convincing if he could show where Marx and

Engels ever defended the practice of 'the dictatorship of the party' *over* the proletariat, where they espoused the notion of *partijnost'* or class truths in natural science, where they approved of the cultural terror involved in the program of the 'Bolshevization' of science.

It is hardly disputable that on the basis of the theory of historical materialism, Marx expected socialism as a developed economy to appear first in the Western countries which possessed a highly developed technology and not in backward countries like Russia and China.

While Stalin was alive neither Suvorov nor Mitin dared to question any position Stalin took in philosophy – in which he was illiterate – or in politics – in which he was, according to Khrushchov himself, a tyrant. Today, they criticize the 'cult of the individual' but, since they claim to be Marxists, they should explain how it was socially and politically possible for the 'cult of the individual' to develop. The obvious answer is that the un-Marxist system of party dictatorship, which they both support, made it possible for Stalin to commit his crimes. A sincere criticism of Stalin's crimes, therefore, requires a straightforward criticism of the system of organized terror which made his infamies possible. Since Suvorov and Mitin were an integral part of the Stalinist terror-apparatus, as was Khrushchov, they dare not speak frankly without condemning themselves. That is why, unable to meet my contention that Marxism did not envisage a program of party dictatorship and cultural terror, they substitute personal abuse for reasoned argument and historical analysis.

When I claimed that Trotsky in 1917 adopted Lenin's un-Marxist theory of political organisation and that Lenin adopted Trotsky's un-Marxist program of world revolution with Russia as base, Suvorov, instead of examining the texts, points to Lenin's criticisms after October of Trotsky's proposals to tie the trade unions more closely to the state – an issue which is completely irrelevant to the points I made. Suvorov charges me with an attempt to put Trotskyism in place of Leninism. The truth is that I do no such thing, but indicate that *both* Lenin and Trotsky were the greatest revisionists of Marx in history. I also argue that in a very profound sense their very success in building a new society in the USSR constitutes a disproof of Marx's theory of historical materialism. For they showed that instead of politics 'reflecting' the mode of economic production, terroristic political means could sometimes lead to a revolution in the mode of economic production.

Sidney Hook

VARIA

The selected writings on esthetics of Prof. Roman Ingarden have been published in the Russian translation of A. Ermilova and B. Fedorov, with a foreword of W. Razumnyj (Roman Ingarden: *Issledovanija po estetike.* IIL, Moskva. 1962. 572 pp.). The volume includes a number of smaller writings but not the main work of this philosopher, *Das literarische Kunstwerk*. With the publication of this book another important Western work is made available to Soviet philosophers (it is *not* available to the French or English reader). The foreword of W. Razumnyj is very much different from that with which another Polish author, translated into Russian, A. Tarski, has been gratified – in spite of the fact that Ingarden is an outspoken (ontological) idealist while Tarski is not idealist in any sense of the word. – Unfortunately, no *tiraž* is given. Let us hope that it is not too small. *J.B.*

V. P. Rožin writes in his recent book, *Vvedenie v marksistskuju sociologiju* (Izd. LGU. 1962. 159 pp.): "There is no unity of opinion among Marxists as to the problem what is Marxist sociology. Certain believe that historical materialism is Marxist sociology. Others admit the autonomy *(samostojatel'nost')* of historical materialism and of Marxist sociology" (pp. 15 f.). His own point of view is the following: "historical materialism is, from one point of view, a philosophical science, from another, sociology" (p. 22). What the book offers is, however, just historical materialism. *J.B.*

REVIEWS

L. V. Vorob'ev, V. M. Kaganov, A. E. Furman: *Osnovnye kategorii i zakony materialističeskoj dialektiki.* (Red. G. V. Platonov). Moskva. Izd. MGU. 1962. 360 str.

Another new compendium! This time a separate presentation of the dialectic. The members of the Diahistomat section of the natural science faculties of the MGU evidently intend it for the use of their students since the presentation of the usual theses is ornamented with examples from the natural sciences, especially from biology. On the negative side, this means that the book is not to be an original contribution to the treatment of unsolved and disputed questions. In fact, there is very little in it on the numerous recent discussions. Although the three authors have a few differences of opinion, these are only mentioned in the preface and have no place in each author's section.

The breakdown of the content of the book shows that the authors treat the dialectic as an 'element' alongside materialism and see no objections to this mode of procedure. There is no mention of those who hold this distinction to be illegitimate and who consider 'dialectical materialism' and the 'materialist dalectic' to be synonymous.

There are some innovations in the presentation of the content. There is the usual general consideration of the ordinative *(zakonomernyj)* connections of phenomena followed by a treatment of the customary categorial groupings: cause and effect; necessity and chance; possibility and actuality; essence and appearance, form and content; singular, particular and universal. The three basic laws – in the order prescribed by the *Osnovy* – bring up the rear. There are no methodological reflections on the reasons for choosing this order.

Quantitatively speaking, this book is more extensive in its treatment than are the other comparable works. This is due – at least in part – to the great attention devoted to the meanings of statements and concepts. The section written by A. E. Furman is especially noteworthy in this respect. But, in many cases one has the impression that this differentiation causes confusion because the opposite tendencies toward integration and ordering are not strong enough.

H. Fleischer

Studies in Soviet Thought II, 4 (December 1962) © *D. Reidel, Dordrecht-Holland*

I. I. Novinskij: *Ponjatie svjazi v marksistskoj filosofii.* Moskva. Izd. 'Vyssšaja škola'. 1961. 200 str.

Even though an earlier work of the same author (*FN* 1959, 2) justified no great hopes, one could have expected that his monograph on the fundamental category of 'connection' would be of some interest. But, one finds that he did not do too good a job. The 'rational core' of his two hundred pages would have been better put in a smaller brochure; digressions from the main topic are discouragingly frequent.

In the five chapters of his book, Novinskij deals with: 1. The pre-history of the problem (pp. 7–51); 2. The 'objectivity' of the study (pp. 52–72); 3. The general characteristics of the category (pp. 73–135); 4. The structural types of connections (pp. 136–165); and 5. The 'efficacity *(dejstvennost')*, the character and the nature' of connection (166–200).

One would expect from such a study a discussion of the typological differentiation of 'connection' in the domain of concepts and categorial structures, on the one hand, and in that of real objects, their 'qualities' and modes, on the other; and, among other things, a clarification of the meanings of 'relation' and connection, an analysis of the make-up of the causal, functional and ordinative connections. Novinskij adds to the general characterization of connection little more than a multitude of examples. "The concept 'relation' *(otnošenie)"*, he writes, "expresses the unity of connection and limitation." (p. 136). He does not hold the concept of 'function' to be illegitimate or superfluous but thinks that in philosophy the concept of causal connection should be given preference (p. 179) – as if it were a question of prefering one word to another, and that's all! Really funny are the fifteen structural types *(strukturnye tipy)* of connections which Novinskij has pre-prepared, named, and put in symbolic form. The rôle of the modes of production in the development of society, of practice in theory; the primacy of matter over thought; 'the determinant significance of the object of reflection, of the work of the brain, and of practice in the formation of consciousness' – all these contain a structural type which Novinskij calls *'svjaz' isxodnogo napravlenija'* (connection in the direction out from the point of origin): A is the foundation of B, A is oriented toward B, A → B. When B reacts on A, one has a *'svjaz' obratnogo napravlenija'* (connection in the opposite direction); when A and B have a 'direction toward one another', they are in *'svjaz' vstrečnogo*

napravlenija' (connection in the direction of an encounter). Similarly, there are transmissive, direct, indirect, summative, synthetic, systematic, systemless, spatially external, internal, etc. connections. The process of concept-formation is always the same: a purely superficial description is the basis for giving a name.

Novinskij pays no attention to previous attempts by Soviet philosophers (I. V. Kuznecov, S. T. Meljuxin, G. A. Svečnikov, B. A. Grušin, M. N. Alekseev, and others) to make a classification of types of connections. He only touches one interesting disputed question: can one speak – as Rozental' and others do – always of only the 'inner' and not the 'outer' connections of a thing as essential and determining? Novinskij answers in the negative (pp. 160–162).

H. Fleischer

Zbigniew K. Brzezinski: *Ideology and Power in Soviet Politics*. New York. Frederick A. Praeger, 1962. 180 pp.

This volume is a collection of five recent essays by Professor Brzezinski which were published previously in various scholarly journals. This reviewer is less than enthusiastic about the increasing number of such 'non-books' now being published, but Brzezinski's volume is a happy exception; it really is valuable to have these five articles bound together for purposes of comparison, and because the essays all deal with different facets of the central problem of Communist ideology and power, the resulting volume exhibits a unity seldom found in such collections of republished essays. Moreover, Brzezinski has written a provocative introduction to this volume which forcefully states the principal issues at stake in this field, and serves as a useful supplement to chapter 16 of his earlier book, *The Soviet Bloc* (1960).

Brzezinski views the usual distinction between ideological and power considerations as an artifical abstraction and a misleading issue, and he argues that attempts to isolate them tend to deny what is most characteristic of the Communist movement, namely a blending of ideology and power. In arguing his case, Brzezinski effectively exposes some current illusions about the nature of Soviet ideology: as he points out in what is probably the best essay of the book, "Communist Ideology and International Affairs", there is a tendency in the West to view ideology as something irrational and to regard it as a political liability. Some of the basic assumptions of Communist ideology may be irrational, but Brzezinski argues that they are sufficiently removed from immediate policy considerations that they do not necessarily result in irrational conduct. Moreover, some of the concepts of the ideology do give some meaningful insights into current international affairs: this reviewer would have to agree that the Communists' ideology has probably given them a more sophisticated approach to the social and political processes at work in the anti-colonial revolution than the overly legal-diplomatic approach of the Western nations. At the same time, certain tendencies of the ideology to conceive of situations in overly simplified terms also distort its own insight and make certain policies ineffective.

The parts of Brzezinski's book which will be of greatest interest to readers of this journal are his discussions of the development, change, and

Studies in Soviet Thought II, 4 (December 1962) © *D. Reidel, Dordrecht-Holland*

erosion of ideology – difficult topics which Brzezinski handles with admirable insight and clarity. He points out that ideological change and erosion are closely related, but that there is a difference between them. Change must take place in order to keep the ideology responsive to social needs. Erosion occurs either when the ideology becomes so dogmatic that it no longer corresponds to reality, or when the reality changes so much that even a maximum streching of the ideology no longer suffices to encompass it.

The growing diversity of ideological interpretations in the Soviet bloc presents problems; the Soviets now find it necessary to tolerate fellow Communists who use the traditional concepts to reach conclusions different from those reached by the Soviets. This undermines the claim of universal validity, and leaves the Soviets in a dilemma: if they attempt to re-attain the unity, they risk further divorcing the ideology from reality, and if they tolerate an increase in such diversity, elements of relativism are introduced which are dangerous to the cohesion of the ideology.

However, Brzezinski warns that we should not expect to see the ideology wither away in our lifetimes; he argues that most of the factors which other people point to as contributing to the decline of the rôle of ideology, such as urbanization and industrialization, may also tend to perpetuate the rôle of the ideology. His lucid arguments will not be a source of comfort to those who think that the Soviet Union is gradually moving in the direction of a 'bourgeois' state.

This provocative and stimulating book can be read with profit by everyone who is interested in Soviet affairs, and one hopes that its readers will include as many Western politicians as possible.

D. D. Comey

CHRONOLOGY

20 Dec. 1961 Discussion of V. P. Rožin's speech, "Questions of the Theory of Base and Superstructure in the Light of the Decisions of the 22nd Party Congress", at the philosophical seminar of the philosophy faculty of LGU. (*V LGU* 1962, 5, 157–158)

1962

25–26 Jan. Conference of Gor'kij section of Society of Psychologists on 'individual-psychological differences'. (*VP* 1962, 3, 188–189)

February All-Union Conference on Questions of the Elaboration and Propagation of Scientific Atheism, in Moscow. (*VF* 1962, 8, 160–163)

15–17 Feb. Meeting of the Urals section of Society of Psychologist. (*VP* 1962, 4, 190)

20–22 Feb. Inter-university conference in Riga on "The Communist Party – Organizer of a Mighty Spread of Culture in the Period of Large-Scale Construction of Communism". (*FN* 1962, 4, 121–125)

27 Feb. – 3 March Russian inter-university conference in Moscow on criticism of contemporary bourgeois ideology. (*FN* 1962, 4, 125–128)

5 Apr. Session of AN SSSR (Section of Economic, Philosophic and Jurisprudential Sciences; Section for Literature and Language; Section of Historical Sciences) in honor of Herzen's 150th birthday. (*VF* 1962, 7, 149–151)

19–21 Apr. Inter-university conference at MGU on the growth of socialist government during large-scale construction of Communism. (*VF* 1962, 8, 155–159)

REPORT FROM THE INSTITUTE

Lectures. Teaching activity was resumed at the Institute on October 17. In addition to the three regular programs (F, H and K), the new program, P, in physics and philosophy has been started. There were 42 students registered for the first semester.

Conferences Abroad. Prof. J. M. Bochenski delivered a series of three lectures on 'Soviet Philosophy. Present State and Prospects for the Future' at the University of Notre Dame on October 26, 1962.

Publications. Z. A. Jordan's *Philosophy and Ideology. The development of Philosophy and Marxism-Leninism in Poland since the Second World War* (1963, XII + 600 pp.) is being published in the 'Sovietica' series.

INDEX OF NAMES

Abbagnano, N. 70
Ackermann, W. 37
Acton, H. B. 220, 320
Adjukiewicz, K. 142
Afanas'ev, V. G. 69
Ahlberg, R. 89, 145
Akčurin, I. A. 289
Aleksandrov, A. D. 36, 52, 60, 63, 69, 300
Aleksandrov, G. F. 77, 78, 121, 329
Alekseev, I. S. 56
Alekseev, M. N. 11, 228, 336
Allah 243
Andreev, I. D. 69, 287
Andreeva, G. M. 117
Angelelli, I. 83
Anisimov, S. F. 234
Anoxin, K. P. 324
Anri, V. 255, 260
Anselm 243
Aquinas 243, 244, 246
Arcimovič, L. A. 59
Arcybyšev 259, 260
Aristotle 77, 201, 244
Arnold, T. 93
Arxangel'skij, L. M. 232
Arxipcev, F. T. 14, 20
Askinadze, Ja. F. 58, 63
Asmus, V. 34, 39, 321, 322
Ayer, A. J. 204–213, 217–219, 255
Austin, J. A. 205

Bacon, F. 165, 191
Bakradze, K. S. 9, 11, 99, 321
Bakšutov, B. K. 232
Ballestrem, Karl 89
Balzac, H. 249
Barcan Marcus, R. 38
Bassin, F. V. 251
Bauer, R. 144, 251
Bavink, B. 61
Baženov, L. B. 52
Berdiaev, N. A. 142
Bergson, H. 63
Bernays, P. 151
Bernouilli, J. 256, 260
Bernstein, E. 106
Bikkenin, N. B. 282
Birjukov, B. V. 21
Black, M. 218
Blakeley, T. J. 82, 83, 93, 95, 247, 248, 261
Bljumberg, V. Ja. 52
Blok, A. 149
Bloxincev, D. I. 255, 260, 290, 299
Bocheński, J. M. 11, 37, 70, 82, 83, 89, 103, 220, 241, 261, 285, 320, 340
Bočver, D. A. 34, 37, 218
Boeck, H. 231
Bogoljubov, N. N. 255, 260
Bohm, D. 215, 219
Bohr, N. 57, 61, 166, 255, 256, 260
Bolzmann, L. 255, 260
Born, M. 255, 259, 260
Boržeanu, K. 203
Boyle, R. 213
Brady, P. 89
Brahm, H. 91
Broglie, L. de 215, 219
Brzezinski, Z. 303, 320, 337, 338
Buchholz, A. 140, 141
Buddha 243
Bulaić, Ž. 117
Bunge, M. 229, 231
Burali-Forte, C. 38
Butenko, A. P. 107, 108, 109, 116, 117
Butov, A. 256, 260
Bykov, K. M. 323, 324
Byxovskij, B. 72, 220

Cantor, G. 38
Cagolova, N. A. 118
Carew Hunt, R. N. 320
Carnap, R. 28, 30, 34, 35, 208, 218, 322
Chardin, T. de 239
Chisholm, R. 218
Chomsky, N. 33
Church, A. 27, 34
Clemens, G. M.
Cohen, A. C. 238
Comey, D. D. 76, 83, 93, 148, 157, 204, 205, 253
Curry, H. 43

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

Čagin, B. A. 80, 81
Černavskij, V. A. 34
Černyševskij, N. G. 74
Česnokov, D. I. 105, 110
Česnokov, E. N. 69, 287
Čerkesov, V. I. 271, 287, 288, 321, 322
Čibakova, A. S. 77
Čugaev, A. Ja. 126
Čupaxin, I. J. 38

Darwin, C. 80, 134, 246
Deborin, A. M. 143, 145–148, 223, 321
DeGeorge, R. 261
Denisova, L. 70
Descartes, R. 257, 260
DeSitter, W. 237
Destouches, J. L. 44
Dilthey, W. 140
Dimitroff, G. 231
Dobronrarov, I. 34, 218
Dobrotin, D. A. 51
Dray, W. 218
Drobnickij, D. G. 232
Dubinin, G. M. 232
Dühring, E. 288
Džunusov, M. 127

Efirov, S. 71
Einstein, A. 10, 53, 57, 60, 135, 145, 146, 211, 212, 215, 218, 227, 237, 255, 258, 260
Egorov, A. G. 117
Élez, J. 105, 110, 112, 117
El'jaševič, M. A. 256, 260
El'sberg, Ja. E. 233
Engels, F. 14, 18–20, 93, 94, 119–121, 125, 131, 146, 158, 164, 192, 215, 222, 231, 237, 272, 274, 288, 311, 312, 313, 315, 319, 332
Engst, Ja. 231
Ermilov, A. P. 65, 66
Ermilova, A. 333
Esenin, S. 149, 150
Esenin-Vol'pin, A. S. 148–157

Fabrikant, V. A. 256, 260
Fataliev, X. M. 238
Fedčenko, P. A. 159
Fedorov, B. 333
Fedorov, F. I. 256, 260
Fedoseev, P. N. 53–55, 61, 78, 224
Feigl, H. 219
Feuer, L. 144
Feuerbach, L. 74
Finn, V. K. 21, 34, 36
Fišman, I. M. 51
Fitch, F. B. 40, 41, 43
Fleischer, H. 75, 83, 89, 94, 119, 163, 261
Flew, A. 218
Fogarsi, B. 236
Fok, V. A. 58, 59, 62, 63, 256, 260, 290, 299
Francev, Ju. P. 232
Frank, P. 55, 61, 208, 218
Frenkel, Ja. I. 145
Freud, S. 228, 253
Fridman, V. G. 256, 259, 260
Frolov, I. T. 202, 229
Frunze, M. V. 127
Furman, A. A. 30, 229, 288, 334

Gaaz, A. 256, 260
Gagarin, A. P. 327–330
Gagarin, J. A. 328
Gak, G. M. 125, 126, 130, 279, 321
Galileo 213, 214
Gamow, G. 50
Gaunilo 244
Gavrilov, A. 327
Gejviš, Ju. 256, 260
Gell-Mann, M. 256, 260
Gellner, E. 323
Glezerman, G. E. 186, 187, 202, 203
Glivenko, V. M. 37
God 243–247, 305, 325
Gödel, K. 27, 37, 44, 151, 241
Golik, A. Z. 57
Golovaxa, I. P. 57
Golub, A. M. 57
Goodstein, R. L. 34
Gornštejn, T. N. 58, 63
Gorskij, D. P. 21, 32
Grigonis, I. K. 51
Grushin, B. A. 336
Gulian, K. I. 232

Hackstaff, L. H. 37, 241, 242, 261
Hanak, T. 236

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

Hanson, N. R. 35, 219
Hartmann, N. 191
Hayek, F. A. 218
Hegel, G. W. F. 8, 56, 146, 200, 277, 280, 292, 310
Heinzig, D. 92
Heisenberg, W. 256, 257, 260
Heller, A. 236
Heller, C. 89
Hempel, C. G. 30, 35
Heraclitus 213
Herzen, A. 282, 339
Hesse, M. 35
Heyting, A. 37, 40, 46, 48, 241, 242
Hilbert, D. 30
Hingley, R. 320
Hirsch, H. 89
Hitler, A. 92
Hölderlin, F. 250
Horvath, J. 237, 238
Hristić, J. 109, 110, 117
Hutten, E. H. 35

Ignatov, A. I. 229
Il'ev, A. 327
Il'ičev, L. F. 224
Ingarden, R. 233, 333
Ioffe, A. 145, 257, 260
Iovčuk, M. T. 80, 81, 233

Jablonski 37
Jadov, V. 127, 131
Jakimov, A. Ja. 239, 240
Jakobi, K. G. 257, 260
Janoši, L. 257, 259, 260
Janovskaja, S. A. 11, 21, 34, 48, 218
Janzen, N. 202
Jaspers, K. 142
Jefferson, T. 311
Jesus 239, 247
Johannson, I. 40
Joravsky, D. 142–148, 239, 240, 321, 330
Jordan, Z. 83, 239, 340
Judin, P. F. 69, 147

Kaftanov, S. V. 77
Kaganov, V. M. 229, 288, 334
Kalackij, V. P. 69
Kaltaxčan, S. T. 224
Kammari, M. D. 80
Kant, I. 156, 243, 246, 322
Kapica, P. L. 219, 226, 227, 228
Karapetjan, L. M. 75
Karpov, M. 257, 260
Kašin, N. V. 257, 260
Kautsky, K. 91, 106, 115, 117, 192
Kazarinov, V. V. 109, 117
Kedrov, B. M. 38, 53, 68, 77, 209, 212–217
Keldyš, M. V. 54
Kelle, V. Ž. 122, 125, 126, 127, 130, 131
Kemeny, J. 34
Kessel, W. 90
Kettenbach, H. W. 91
Khrushchov, N. S. 8, 65, 75, 79, 80, 164, 165, 231, 314, 329, 332
Kirillov, B. I. 64
Kiselencev, A. 327
Kiselëva, N. A. 51
Klaus, G. 16, 20
Kleene, S. C. 45, 46, 48, 151, 241
Kline, G. L. 75, 76, 89, 321
Kołakowski, L. 10, 131
Kolman, A. 218
Kolmogorov, A. N. 37
Kondakov, N. I. 9, 38
Konstantinov, F. V. 68, 69
Kopnin, P. V. 32, 56, 62, 69, 271, 287, 288
Korolev, F. 257, 260
Kornilov, K. N. 251
Kotarbinski, T. 241
Kotikova, D. D. 117
Kovalev, A. G. 232
Kovalgin, V. M. 202
Koval'zon, M. 122, 125, 127, 130, 131
Kozlov, F. R. 224
Kravec, T. 257, 260
Kronrod, Ja. K. 239
Krupskaja, N. K. 231
Kún, B. 250
Küng, G. 83
Kursanov, G. A. 61, 218, 233
Kuznecov, A. V. 21, 36
Kuznecov, D. 34
Kuznecov, I. V. 49, 53, 209–219, 228, 257–260, 336

Lamarck, J. B. 80
Lande, A. 289

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

Langevin, P. 256, 260
Langford, C. H. 48
Laszlo, E. 235
von Laue, M. 257, 258, 260
Laxuti, D. G. 21, 34, 36, 218
Lebedev, P. N. 61, 256
Lefèbvre, H. 220
Leibniz, G. W. 18
Lejman, I. I. 50
Lemaître, G. E. 51
Lenin, V. I. 12–15, 17, 18, 22, 23, 49, 51, 57, 61, 68, 70, 75, 80, 81, 89, 91, 92, 93, 99, 117, 126, 128, 129, 132, 134, 143, 144, 160, 206, 210, 211, 215, 222–224, 231, 237, 246, 255, 257, 259, 276, 290, 292, 299, 300, 310–312, 315, 317, 319, 322, 332
Leont'ev, A. N. 251, 252
Levada, Ju. A. 239
Lewis, C. I. 48
Lieber, H. J. 89, 94
Lichtenberg, C. G. 155, 156
Liencour, F. 89
Lobačevskij, N. I. 211, 237
Lobkowicz, N. 11, 82, 83
Lomonosov, M. V. 257, 260
Lorentz, H. 257, 259, 260
Lucretius 259
Ludz, P. 89, 249
Lukács, G. 236, 249, 250
Łukasiewicz, J. 34, 37, 45, 46
Lukić, R. 117
Luppol, I. K. 321
Luria, A. R. 251, 252
Lysenko, T. D. 77, 323

Macevičus, I. A. 53
Majstrov, L. E. 36, 38
Majstrov, L. J. 11
Makarenko, A. S. 231
Makarov, A. D. 287
Maksimov, A. A. 49, 227, 257, 258, 260
Mal'čev, V. I. 321
Malov, N. 258, 260
Mamardašvili, M. K. 68
Mamzin, A. S. 50
Mandel'štam, L. T. 256, 260, 291
Maneev, A. K. 52, 53, 135, 256, 260
Mannheim, K. 315
Mao Tse-tung 238, 239
March, A. 291, 299
Markov, A. A. 59
Markov, A. D. 69
Markov, A. S. 48
Markov, M. A. 77
Markovič, M. 106–109, 111, 115, 117
Marx, K. 18, 61, 75, 89–91, 93, 94, 99, 112, 119–121, 125, 131, 196, 200, 231, 233, 240, 246, 247, 252, 282, 311, 313, 315, 319, 331, 332
Matveenkov, I. I. 53
Maxwell, G. 219
Mehring, F. 131
Meljuxin, S. T. 18, 20, 51, 69, 157–163, 202, 229, 336
Mendeleev, D. I. 210, 213
Michalcev, D. 327
Michajlov, M. S. 107, 108, 115, 118
Mill, J. S. 311
Miller, J. 320
Mindlin, I. 127
Minkowski, G. 258, 260
Mirošničenko, F. D. 51
Mischke, Ricarda 89
von Mises, R. 258, 260
Mitin, M. B. 57, 81, 147, 222, 224, 290, 331, 332
Mitra 243
Mixailov, N. A. 78
Moh-Shaw-Kwei 38
Molodcov, V. S. 109, 118
Molotov, V. M. 317
Moore, B. 308, 320
Moročnik, S. B. 202
Mostowski, A. 151
Müller-Markus, S. 11, 82, 83, 261

Naan, G. I. 18, 20
Nagy, I. 250
Nalimov, V. 259
Napolova, T. T. 233
Nedošivin, G. A. 110, 118
Newton, I. 256, 259, 260
Nielsen, K. 325, 326
Nikitin, P. I. 323
Nikolaev, V. V. 105, 118
Narskij, I. 71
Novikov, P. S.

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

Novinskij, I. I. 335, 336

O'Connor, N. 253
Ojzerman, T. I. 223, 321
Okulov, A. F. 53, 65, 68, 80, 81, 230
Olgin, C. 320
Omel'janovskij, M. E. 68, 224, 228, 289–292, 294, 295, 297–299
Orbeli, L. A. 323
Orlov, I. E. 321
Orlov, V. V. 17, 18, 20
Osipova, E. V. 105, 110, 112, 117
Ostwald, W. 62
Ovčinnikov, N. F. 49, 228, 258–260
Owen, R. 79

Pachomov, B. Ja. 51
Pancxava, I. D. 234, 243
Parin, V. V. 323, 324
Pasternak, B. 149
Pauling, L. 254
Pavlov, I. P. 134, 228, 251, 323, 324
Pavlov, T. 321, 327
Pears, D. F. 218
Peirce, C. S. 28, 205
Permjakov, S. M. 118, 233
Peter, R. 236
Petrosjan, M. 118
Pfoh, W. 288
Philipp, W. 89
Planck, M. 256, 258, 260
Planty-Bonjour, J. 83
Plato 201, 244
Platonov, G. B. 334
Platonov, G. V. 229
Pljušč, L. N. 229
Ponomarev, S. T. 224
Popov, A. I. 38
Popov, P. S. 21, 236
Popper, K. 30, 35
Poreckij, P. S. 323
Post, E. L. 37
Pozner, A. P. 56
Pozner, A. R. 289
Praeger, F. A. 148
Pushkin, A. S. 149

Quine, W. 35, 41

Račkov, P. A. 126

Ratković, R. 110, 111, 117
Razin, V. I. 75
Razul'-Zatulovskij, Ja. B. 68
Razumnyj, W. 333
Rearey, G. 148
Redlow, G. 14, 20
Rehmke, J. 327
Reichenbach, H. 35, 37, 42, 44, 58, 62, 228
Reidel, D. 82
Revai, J. 250
Rescher, N. 218
Révész, L. 261
Riemann, G. F. B. 237
von Ribbentrop, J. 317
Rockefeller 89
Róka, G. 236–238
Rosenberg, É. N. 30, 35
Rosser, B. 151
Rozenbaum, E. 256, 260
Rozental', M. M. 69, 202, 233, 282, 288, 321, 325, 326
Rožin, V. P. 271, 287, 321, 333, 339
Rubel, M. 89
Rubinštejn, S. L. 14, 17, 67
Rudakov, V. N. 52
Ruegg, B. 89
Rumer, Ju. B. 51
Russell, B. 35, 38, 40, 43, 48, 57, 139, 208, 218
Rüter, A. 89
Rutherford, E. 213
Rutkevič, M. N. 8, 14, 20, 68, 271, 279, 281, 282, 288
Ryle, G. 205, 206
Ryvkin, M. S. 51

Sačkov, Ju. V. 52, 202, 229, 289
Sadovskij, V. N. 36
Sanočkin, Ju. V. 255, 260
Sarab'janov, V. 322
Sartre, J. P. 220
Schaff, A. 142
Scheffler, I. 218
Schilpp, P. A. 48
Schrödinger, E. 215
Schulze, H. 288
Sciacca, M. F. 70
Scott, W. 249
Scriven, M. 218, 219

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

Sečenov, I. M. 134, 251, 323
Sëiti, S. 289
Selsam, H. 231
Selvinskij, I. 324
Semenov, V. S. 68
Semkovskij, S. Ju. 145
Serbent, V. A. 53
Sharp, S. L. 320
Skolem, T. 38
Simon, B. 251
Smirnov, V. A. 30, 36
Smirnova, E. D. 31
Solgalov, G. 56, 62
Solov'jëv, V. D. 58
Somagyi, J. 234
Sorokin, V. 258, 260
Spasov, D. 327
Spirkin, A. G. 17, 70
Stalin, I. V. 9, 38, 75, 77, 78, 92, 93, 121, 144, 150, 222, 239, 243, 249, 283, 310, 315, 317, 318, 322, 325, 331, 332
Stegmüller, W. 240
Stepanjan, E. X. 126
Stepanjan, F. V. 68
Stjažkin, N. I. 21, 259, 323
Stökl, G. 89
Stoletov, N. V. 57, 59, 67
Stolovič, L. N. 233
Strawson, P. F. 205, 217
Subbotin, A. L. 21, 29, 34
Surova, I. L. 229
Suslin, M. Ja. 151
Suslov, M. A. 78, 221, 224, 329, 330
Suvorov, L. N. 330–332
Suvorov, S. 259, 260
Suvorova, S. G. 256, 260
Svečnikov, G. A. 202, 229, 336
Sviderskij, V. I. 59, 238, 387
Sazalai, S. 236

Šandra, V. A. 239
Šapiro, I. S. 289
Šarija, K. S. 202
Šaxparonov, M. I. 56
Ščedrovickij, G. 36, 58
Ščekina, L. I. 58
Ščipanov, I. Ja. 223
Šedrovickij, G. P. 312
Šelepin, A. N. 224
Šestakov, M. G. 37, 118
Šestakov, V. P. 239
Širokanov, D. I. 202
Širokov, M. F. 61
Šiškin, A. F. 67, 72, 230, 231, 232
Šoroxova, E. V. 229
Štejnman, R. Ja. 259, 260
Štraks, G. M. 202, 203
Švidkovskij, E. 256, 260
Švyrev, V. S. 30, 31, 35

Tamm, I. E. 145, 259, 260
Tančer, V. K. 66, 247
Tarski, A. 27, 44, 240, 241, 333
Tavanec, P. V. 240
Taylor, R. 218
Terleckij, Ja. P. 55, 219, 258, 259, 260
Thalheim, K. C. 11
Thälmann, E. 231
Timirjazev, A. K. 144
Timirjazev, K. A. 246
Tolstoy, L. N. 249
Tomil'čik, L. M. 256, 260
Tugarinov, V. P. 11, 14, 15, 17, 18, 20, 36, 38, 69, 72–75, 123, 125, 126, 128, 131, 202, 203, 231, 232, 271, 275, 287, 321
Tulenov, Ž. 202
Trotsky, L. 91, 92, 332
Trusov, Ju. P. 49

Uëmov, A. I. 21
Uëmov, N. F. 228
Utkin, S. 231
Uvarov, A. A. 36
Uznadze, D. N. 251

Varga, T. 236
Var'jas, A. 321, 322
Vasečkij, G. A. 229
Vavilov, S. 166, 257, 259, 260
Vigier, J. 81, 215, 219, 289
Vladimirov, V. T. 232
Vleduc, G. 259, 260
Vojšvillo, E. K. 21, 36, 58
Volčenko, L. B. 232
Vol'pin, N. 150
Voltaire 259, 260
Vorob'ev, L. V. 218, 288, 334
Vorob'ev, N. V. 34, 55, 61

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

Vostrikov, A. V. 69, 287
Vrtačič, L. 83, 93
Vygotskij, L. S. 251
Vyšinskij, A. I. 75

Wagenlehner, G. 93
Watts, J. 261
Weiss, A. 11
Weizel, S. W. 62
Wetter, G. 71, 139, 145, 146, 220, 285, 320, 321, 330, 331
Whitehead, A. N. 40
Wiener, N. 68, 81
Wigner, E. 259, 260
Wisdom, J. 205
Wittfogel, K. 238
Wittgenstein, L. 28
Wortis, J. 251

Xajkin, S. 257, 258–260

Zabello, Z. I. 229
Zawirski, Z. 241
Zinov'ev, A. 9, 11, 29, 30, 37–48, 83, 241, 242

Ždanov, A. A. 77, 121
Žmudskij, A. Z. 57, 63
Žoža, A. 166
Žuravkov, M. G. 232

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

INDEX OF SUBJECTS

AN SSSR 49, 50, 166
abstraction 98; mathematical 51, 293
acoustics 133
action, political 105
agriculture 165
'algebra of revolution', dialectic as 282–285
analogy 136
analysis, linguistic 204; sentential 43
analytic and synthetic knowledge 31, 35
animal behavior 136
Anschaulichkeit in der Quantenmechanik 289–300
All-russian Seminar of Higher School Teachers 59
All-union Coordination Conference on Questions of Philosophy 53
All-union Conference on Philosophical Problems of Modern Science 49, 290
All-union Conference of Scientists 54
anthropology 73, 74
anti-clericalism 243
anti-Communism 221, 226, 254
antinomies, logical 44; semantic 42
appearance and essence 133
art 79
astronomy 138
asymmetry, symmetry and 134
atheism 8, 64, 65, 66, 67, 132, 225, 234, 235, 243–248; scientific 328
atomic physics 132
'authentication' of ideology and policy 311–312, 315–316, 318
automation, 33, 50, 81, 134, 135
axiology 72–75, 190, 196, 197, 199, 201
axiomatic method 30, 136

B 37
base 9; and superstructure 222, 339
basic dogma 7–8, 10–11
basic faith 8
'basic' propositions and sense-experience 30–31
'basic question' 97
Basis, einheitliche des wissenschaftlichen Erkennens 54
behavior, animal 136
being 70; primacy of 96
Berlin conference 89–94
bibliography 65
biogeochemistry 134
biology 77, 133, 164
bivalent logic 37f
'bolshevisation' of philosophy 147
botany 133
bound, class- 9
bourgeois and Red specialists 143, 146, 147
brain 96
Bulgaria 327
bureaucracy of state 113, 114

calculi, propositional 44
capitalism 107, 111; general crisis of 135; private-monopolistic 112; state- 110, 112, 113
categories 274–277
causal determination 228
causality 56, 137, 162, 183, 212, 215–216, 228, 229
Central Bureau of Philosophic (methodological) Seminars of the AN 49
cereals 138
chance 137
change, ideological 8, 317–318, 338
chemical elements 137
chemistry 133
China 330
class -bound 9; -conflicts 107, 284; -differences 195, 196; -interests 119–131; -oppositions 112; -superstructure 10; -theory 110; working 108, 110
classical logic 40
classics 97
classification of sciences 132
cognition, s. knowledge
Communism, scientific 66; socialism to 225; victory of 7,8; construction of 137, 164
Communist consciousness 240; education 66, 134, 135, 164, 165; morality 327; Party 339

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

compendia of Diamat 68, 69
competence, technical 39
complementarity 137
components of ideology 7
computers 21, 132
concept 137
concepts of physics 292
conferences 28–32, 34–35, 49, 53–55, 57–59, 89–94, 290
conflicts, class- 107, 284
confusion, logical 38
Congress, 22nd 339
connection and dialectic 272–273; monograph on 335–336
conscience 135
consciousness 16–18; Communist 240; social 119–131, 135
consistency 40; logical 305–308, 309–310, 317
construction, Communist 137, 164
control, social 135
contradiction 8, 9, 56, 133, 142, 159–160, 238, 275–277
control systems 136
coordinates, harmonic 60
cosmogony 162
cosmology 50, 136
counterrevolution 135
creation, evolution and 243
criology 134
crisis in physics 57
crystal 136
Cuba 330
cult of personality 327
cybernetics 7, 10, 50, 59, 132, 135, 136, 138, 167

Deborinite philosophers 143, 144–147
declaration on language 38
declassified doctrines 9–10
decrees (1947, 1950) 38
deduction 9
deideologisation 102
democracy, socialist 164
derivation of thought 96
determination, causal 228
determinism 56, 162–163, 215–216; historical 181–203
development 136
diahistomat 8
dialectic 54, 96, 106, 108, 110, 134, 136, 269–288, 321, 334; as 'algebra of revolution' 282–285; connection and 272–273; laws of 206, 278–282; as method 270, 282; of nature 157–163; structure of 270–274
dialectical contradiction 159–160, 275–277; logic 9, 23–24, 28, 32, 35, 66, 304, 313, 317
dialectics 47
diamat 64, 65, 66; compendia of 68–69; and histomat 224, 310; and psychology 252
differences, class- 195–196; psychological 339
dignity 135
discussion (1947) 77
diversity of logic 39f
doctor 132
doctrines, declassified 9–10
dogma, basic 7–8, 10–11
domain of objects 43, 44
dynamic and statistical laws 52, 54

earth 165
East 66; and West 139f
economics, 'materialism' of 75–76
economy, political 239
education, Communist 66, 134, 135, 164, 165
electrodynamics, quantum 56
electronic computers 132
elementary particles 54, 59, 132, 227, 289
elements, chemical 137
empty 40
'empty fields' 140
energy 132; matter and 227
English moral philosophy 205
epistemology 106, 271; logic and 224
equivalence, principle of 59, 60
erosion, ideological 317–318, 338
essence 98; appearance and 133
esthetics 64–66, 80, 225, 233, 234, 249, 254, 327, 333
ethics 64–67, 79, 137, 139, 225, 229–233, 236, 327
evolution 8, 135, 136; and creation 243; of inorganic matter 157–163; of society

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

183–184, 192–201; tendency of matter toward 18–19
existentialists 116
expansion, theory of 51
expediency 229
experience, verification in 207, 209, 210–211
experiment 136; epistemological essence of 50

faith, basic 8
federalism 92, 93
field 52, 54
finality 189–190, 197, 199
foraminifers 135
forces of production 9
formal logic 10, 39, 66
formal system, logic and 41
foundations, new 41
free will 233
freedom 74, 141, 142, 191; of interpretation 8, 9; of thought 10
Freudian theory 252, 253

general crisis of capitalism 135
genetics 136
geography 134
geology 134, 136
Gesamtheiten, quantenmechanische 290
gnoseological concept of matter 12–16
God, proof of existence of 243–247
government 135; socialist 164, 339

happiness 135
harmonic coordinates 60
hero-worship 222
higher nervous activity 138, 220, 254
histomat 64–66, 81, 137; diamat and 224, 310
historical determinism 181–203
historical necessity 183–203
historical sources 137
history; of philosophy 64–66, 220; subject in 196, 200–201
honor 135
Hungary 235–238, 326
hybridization 138

I-sentences 325
idealism 333; in logic and mathematics 22–23, 24–25, 214; objective 55
ideality 17
identity 136
ideological change and erosion 317–318, 338
ideological indeterminacy 307–310
ideology 114, 119–131, 325; 'authentication' of 311–312, 315, 316, 318; changes in 8; components of 7; knowledge and 122, 126, 127, 130; logic and 33, 34; Marxian meaning of 9; masking function of 315–316; and philosophy 95, 303–304, 310–312, 313; and policy 94; and power considerations 301–302, 136–317, 337; and science 147; *Realpolitik* and 301–302, 316–317; 'scientific' 305, 313
imperialism 91, 113
indeterminacy 58, 215–216; logical 307–310
India 239
infinity, matter and 236–238
information retrieval 28, 33
inorganic matter and evolution 157–163
institutes of philosophy 65
intellectuals 8
intelligentsia 137
intelligibility 96
interests, class- 119–131
interiority 98
international socialism 91
interpretation 97; freedom of 8, 9
intuition 40, 136
intuitionism 37, 40, 41, 44, 47; mathematical 152, 155
intuitionistic truth-values 45
irreversibility of time 228
Islam 134

journal, logic 24, 34
Jugoslav philosophy 104

knowledge 137, 141; analytic and synthetic 31, 35; and ideology 122, 126, 127, 130; physical 77; scientific 54; theory of 106, 137, 321
Komplementärprinzip 56

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

LGU 38
language, declaration on 38; not a superstructure 9
law 114
laws 66, 114, 137; of dialectic 158–161, 278–282; dynamic and statistical 52, 54; of life 133; of nature, variability of 161; scientific 9; of social development 181–203; statistical 229; and theories 212–215
Leninism 223, 224
life 135, 137; laws of 133
linguistic analysis 204
linguistics 77
logic 21–35, 77–81, 99, 135, 236, 321, 322, 323, 327, 329; bivalent 37f; classical 40; dialectical 9, 23–24, 28, 32, 35, 66, 304, 312–317; diversity of 39f; and epistemology 224; formal 10, 39, 66; and formal system 41; idealism in 22–23, 24–25, 214; and ideology 33, 34; journal in USSR 24, 34; many-valued 37f; mathematical 10, 29, 38, 66, 330; of mathematics 39; modal 22; modern 38f; and philosophy 47; philosophy of 38; probability- 22; and psychology 27–28; relativity of 43; standard 40; symbolic 38; teaching of 25–27, 32; traditional 29, 43; unity of 39f
logical antinomies 44
logical confusion 38
logical consistency 305–308, 309–310, 317
logical positivism 204, 216
logical semantics 28, 34

MGU 38, 234, 235
machine, man and 132
man, new 137; rights of 74
many-valued logic 37f; quantification in 29–30
masking function of ideology 315–316
'materialism' of economics 75–76
mathematical abstraction 51, 293
mathematical intuitionism 152, 155
mathematical logic 10, 38, 66, 330; and traditional logic 29
mathematics 132, 136; idealism in 22–23, 24–25, 214; logic of 39
matter 12–20, 51, 132, 158, 160; and energy 227; and infinity 236–238; gnoseological concept of 12–16; movement of 134
means of production 115
measure 137
mechanics, quantum 289–300
'mechanist' philosophers of science 142–143, 145, 147
mechanists 223
medecine 134, 135
metabolism 136
meta-language 42
metaphysics 108
meta-systems 42
method 95–96, 137; dialectic as 270, 282; axiomatic 30, 136; phylogenetic 135
methodological seminars of the AN 49, 50
methodology 81
Metrik der Raumzeit 60
militancy 102
mind 206
mineralogy 134
mission of proletariat 8
modal logic 22
model 30, 35, 43, 136
modern logic 38
modern science 49, 290
moral philosophy, English 205
moral responsibility 135
morality 114, 137, 167, 225; Communist 327
movement 133; forms of 50; of matter 134; physical, chemical and biological 50

nature, philosophy of 59
necessity 137, 181–183; historical 183–203
negation of negation 132, 281–282, 288 (fn. 12), 329
neo-Kantian 116
neopositivism 107
nervous activity, higher 138, 220, 254
nervous system 132
new foundations 41
new man 137
normative statements 308
nuclear research 54

object 43

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

object-system 42
objective idealism 55
objective and subjective 97
objectivism 51, 116
objects, domain of 43, 44
observability 289–300
ocean 133
ontology 14–17, 271, 283–285
operationalism 107
Operatoren, quantenmechanische 294, 297, 298
opposites, struggle of 275–277, 288 (fn. 12); unity and conflict of 132, 134
oppositions, class- 112
organic systems 133
orientalists 164
ownership, private 8

paleontology 165
particles, elementary 54, 59, 132, 227, 289
party-bound 9
party line 220
party-mindedness 107, 116, 119–131, 144, 309, 316, 331–332
party-universities 326
pauperization, theory of 112
peace 135, 141
person 137
personality, cult of 327
phenomena, vital 133
philosophers of science, 'mechanist' 142–143, 145, 147
"Philosophical Encyclopedia" 69, 327
philosophy 139; 'bolshevisation' of 147; chairs of 64, 65; degrees in 64, 65; history of 64–66, 220; ideology and 303–304, 310–312, 313; institutes of 65; Jugoslav 104; and ideology 95; logic and 47; of logic 38; of nature 59; and politics 130, 282–287; as a science 209; and the sciences 311–312, 319; of science 65; Western 220–222
phylogenetic method 135
physical knowledge 77
physical system, state variables of 215–216
physics 51, 55, 77, 133, 164, 226, 229, 340; atomic 132; concepts of 292; crisis in 57
physiology 132, 220, 251–252, 254, 323
planning 136
Poland 239, 340
policy, 'authentication' of 311–312, 315–316, 318; ideology and 94
political action 105
political economy 239
political unity 93, 94
politics, philosophy and 130, 282–287; revisionist 115
positivism 55, 57, 58, 107, 165; logical 204, 216
positivists 116
possibility 58, 160–162
power, ideology and 301–302, 316–317, 337
practice 97, 147, 211
practices, teaching- 67
pragmatism 205
prediction, scientific 207, 209, 210–211
primacy of being 96
"Principia Mathematica" 41–43
principle, complementary 56; of equivalence 59, 60
private-monopolistic capitalism 112
private ownership 8
probability 289
probability logic 22
problem, psycho-physical 97, 134
procedure, rules of 9
production 9, 187, 194–196; forces of 9; means of 115; relations of 9, 113, 115
progress 133; social 194–201, 283
proletariat 113, 114, 116; mission of 8
proofs of existence of God 243–247
propositional calculi 44
psychological differences 339
psychology 67, 251–253, 327; diamat and 252; logic and 27–28; social 137
psycho-physical problem 97, 134

quality, quantity and 160–161, 288 (fn.12)
Quantenelektrodynamik 56
Quantelung von Raum und Zeit 289
Quantenstatistik 54
quantity, s. quality
quantification in many-valued logic 29–30
quantum mechanics 51, 58, 289–300; theory 132, 212, 215, 216, 228
quotationism 323, 325

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

quotations 39

Raum und Zeit 51, 54, 59, 292
realism 107, 206, 217, 250
Realitätsproblem in der Physik 51
Realpolitik and ideology 301–302, 316–317
reasoning 9
reflection (*otraženie*) 13, 96, 206, 214, 215, 252
relations of production 9, 113, 115
relativism, subjective 109
relativity 52, 58, 59, 60, 78, 135, 136, 144, 145, 146, 227, 237; of logic 43
religion 123, 125, 139, 243f
renegades 220
representation 137
research, nuclear 54
responsibility, moral 135
retrieval, information 28, 33
revisionism 10, 66, 79, 80, 93, 104–106, 109, 115, 239, 249
revisionist politics 115
revolution, Russian 91, 92; socialist 111, 113, 114, 116; World- 91, 92
rights of man 74
rules of procedure 9

SU 66
satire 93
science 9, 66, 226, 240, 321; ideology and 147; modern 49, 290; philosophy as 209; philosophy of 65; social 78, 228, 254
sciences, classification of 132; philosophy and 311–312, 319
scientific atheism 328
scientific Communism 66
'scientific' ideology 305, 313
scientific knowledge 54
scientific laws 9, 212–215
scientific prediction 207, 209, 210–211
scientific theories 9, 212–215
scientists 54
self-directing socialism 112, 116
semantic antinomies 42
semantics 107; logical 28, 34
seminar 49, 50, 59
sensation 96
sense-experience, 'basic' propositions and 30–31
sentential analysis 43
sight 132
signal system, Pavlovian 293
social consciousness 119–131, 135
social control 135
social development, laws of 181–203
social progress 194–201, 283
social psychology 137
social science 78, 228, 254
socialism 104, 107, 111; to Communism 225; international 91; self-directing 112, 116; state- 112
socialist democracy 164
socialist government 164, 339
socialist revolution 111, 113, 114, 116
socialist state 110
society 89–91, 228; evolution of 183–184, 192–201; Soviet 225
sociology 66, 134, 165, 166, 225, 249, 333
sources, historical 137
Soviet society 225
Sovietology 331
sovpadenie 97, 99–100, 271
space 237; and time 51, 54, 59, 133, 138, 289, 292
space-time 60
specialists, bourgeois and Red 143, 146–147
species 133
standard logic 40
state, bureaucracy of 113, 114
state-capitalism 112, 113
state, capitalist 110; socialist 110; theory of 110; withering away of 75–76
state variables of a physical system 215–216
statements, normative 308
statistical laws 229
statistical and dynamic laws 52, 54
statistics, quantum 54
structure of dialectic 270–274
struggle of opposites 134, 275–277, 288 (fn. 12)
subject in history 196, 200–201
subjective, objective and 97
subjective relativism 109
substance 13, 14, 16

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

superstructure 137, 164; base and 222, 339; class- 10; systematic 8, 10
syllogism 9
symbolic logic 38
symbolic systems, s. system
symmetry 132, 133; and asymmetry 134
synapses 137
synthetic and analytic knowledge 31, 35
systematic superstructure 8, 10
system, nervous 132; object- 42
systems, control- 136; organic 133
systems, symbolic, generalized 40; infinite-valued 42; interpretation of 43f; interpreted 39, 41; many 39; relation of 41; weakened 40

tactics 135
teaching of logic 25–27, 32
teaching practices 67
technical competence 39
technology 134
tertium non datur 155
textbooks 240
Theorie der Verelendung 112
theories, cosmological 136; scientific 9
theory, class- 110; of expansion 51; of knowledge 106, 137, 321; quantum- 132, 212, 215, 216, 228; of pauperization 112; of state 110
thought 96; freedom of 10
time, irreversibility of 228; space and 51, 54, 59, 133, 138, 289, 292
Tomsk logic conference (1960) 28–32, 34–35
Totalitätsanspruch 101
totalities 290
topics discussed 66, 132–138
traditional logic 43
transition from socialism to Communism 225
truth 96, 98, 99, 137, 240, 318–319; -tables, intuitionistic 45; -values 41, 44–47

Unbestimmtheitsrelation 58
unity, of logic 39f; of opposites 132, 134; political 93, 94
universe 237
universities, party- 326

VUZ 64, 65
value 72–75, 199, 201
variability of laws of nature 161
verification in experience 207, 209, 210–211
victory of Communism 7, 8
visits 68
vital phenomena 133

wave-function 290, 294
Weltanschauung 10, 139; definition of 57
West, East and 139f
Western philosophy 220–222; Soviet familiarity with 34–35, 205, 208–209, 216–217
will, free 233
withering away of the state 75–76
working class 108, 110
world revolution 91, 92

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

TABLE OF CONTENTS

ARTICLES

BLAKELEY, T. J.: Is Epistemology Possible in Diamat? 95–103
BOCHEŃSKI, J. M.: The Three Components of Communist Ideology 7–11
COMEY, D. D.: Two Recent Soviet Conferences on Logic 21–36
COMEY, D. D.: A Positivist Among the Dialecticians 204–219
COMEY, D. D.: Marxist–Leninist Ideology and Soviet Policy 301–320
FLEISCHER, H.: The Materiality of Matter 12–20
FLEISCHER, H.: The Limits of 'Party-mindedness' 119–131
FLEISCHER, H.: Die Idee der historischen Notwendigkeit im historischen Materialismus 181–203
FLEISCHER, H.: Auf dem Bauplatz der materialistischen Dialektik 269–288
HACKSTAFF, L. H., BOCHEŃSKI J. M.: A Study in Many-Valued Logic 37–48
MÜLLER-MARKUS, S.: Die Organisation der sowjetischen Philosophie der Physik 49–63
MÜLLER-MARKUS, S.: Zum Anschaulichkeitsproblem in der Quanten-mechanik 289–300
SOVIETOLOGICAL CONFERENCE IN BERLIN 89–94
VRTAČIČ, L.: Der jugoslawische philosophische Revisionismus im Lichte der sowjetischen Kritik 104–118
NOTES AND COMMENTS 64–71; 132–138; 220–242; 321–333

REVIEWS

BLAKELEY, T. J.: Osnovnye voprosy naučnogo ateizma 243–247
BLAKELEY, T. J.: Osnovy naučnogo ateizma 247–248
BOCHEŃSKI, J. M.: Arnold Buchholz: Der Kampf um die bessere Welt 139–142
COMEY, D. D.: G. L. Kline: 'The Withering away of the State: Philosophy and Practice 75–76
COMEY, D. D.: David Joravsky: Soviet Marxism and Natural Science, 1917–1932 142–148

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms

COMEY, D. D.: Aleksandr Sergeevič Esenin-Vol'pin: Vesennij List 148–157
COMEY, D. D.: Recent Soviet Psychology 251–253
COMEY, D. D.: Zbigniew K. Brzezinski: Ideology and Power in Soviet Politics 337–338
FLEISCHER, H.: V. P. Tugarinov: O čennostjax žizni i kul'tury 72–75
FLEISCHER, H.: S. T. Meljuxin: O dialektike razvitija neorganičeskoj prirody 157–163
FLEISCHER, H.: L. V. Vorob'ev, V. M. Kaganov, A. E. Furman: Osnovnye kategorii i zakony materialističeskoj dialektiki 334
FLEISCHER, H.: I. I. Novinskij: Ponjatie svjazi v marksistskoj filosofii 335–336
RÜHLE, J.: Georg Lukács: Schriften zur Literatursoziologie 249–250

CHRONOLOGY

Retrospective (1947–1959) 77–80
Current (1960) 80–81
Addenda 1960 164
1961 164–167
Addenda 1961 254
1962 254
1962 339

BIBLIOGRAPHY

BALLESTREM, K. G.: Bibliography of Recent Western Works on Soviet Philosophy 168–173
MÜLLER-MARKUS, S.: Bibliography of Philosophical Articles in *Uspexi fizičeskix nauk* (1918–1962) 255–260

REPORT FROM THE INSTITUTE 82–83; 174; 261–262; 340

This content downloaded from 159.178.22.27 on Sun, 31 Jul 2016 13:33:22 UTC
All use subject to http://about.jstor.org/terms